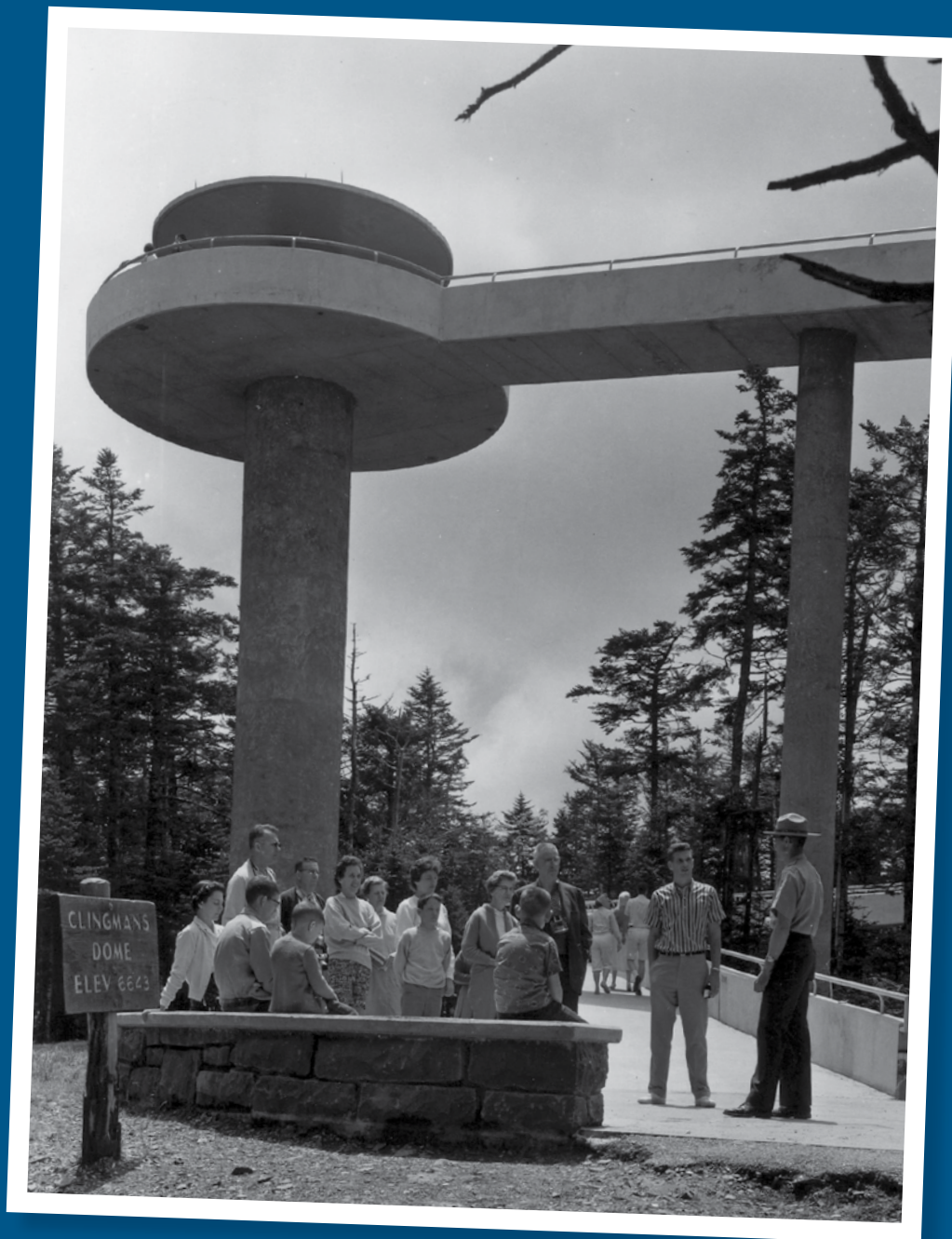




Great Smoky Mountains NATIONAL PARK



GREAT SMOKY MOUNTAINS NATIONAL PARK HISTORIC RESOURCE STUDY

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ACKNOWLEDGEMENTS

The completion of a Historic Resource Study for a park of the great scale and diversity of Great Smoky Mountains National Park (GRSM) would not have been possible without the assistance of many persons. Special thanks go to Cynthia Walton, National Historic Landmarks Program Manager of the National Park Service's (NPS) Southeast Region, who directed the project from beginning to end as the NPS Contracting Officer's Representative, and Dianne Flaugh, GRSM Cultural Resource Program Manager, who shared her substantial knowledge of the park and its historic resources. Erik Kreusch, the former park Cultural Resource Manager, spent a number of days in the field assisting the PAL research team in locating historic resources and provided a substantial amount of information that was used to develop the chapter on extractive industries. Other GRSM personnel who were instrumental in the success of this project include Michael Aday, Librarian Archivist; Thomas Colson, GIS Specialist; Randy Hatten, Acting Assistant Chief of Maintenance; and John McDade, Museum Curator. Robert W. Blythe, formerly with Cultural Resources Stewardship at the NPS Southeast Regional Office, prepared a draft Historic Resource Study in 1999 that served as the foundation for chapters 1, 2, 4, and 6 of this report.

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EXECUTIVE SUMMARY

This report presents the results of a Historic Resource Study (HRS) conducted for Great Smoky Mountains National Park (Great Smoky Mountains NP). Great Smoky Mountains NP is one of the nation's most important recreational resources and is a designated International Biosphere Reserve (1976) and World Heritage Site (1983). Each year more than nine million people visit the park, which occupies more than a half a million acres of land in portions of Blount, Sevier, and Cocke counties in Tennessee and Swain and Haywood counties in North Carolina.

The HRS was conducted to assist the National Park Service (NPS) in meeting its obligations under Section 110 of the National Historic Preservation Act of 1966 as amended, which requires that federal agencies establish a program for the identification and protection of historic properties and ensure that such properties are maintained and managed with due consideration for preservation of their historic values. The HRS report was prepared in accordance with the requirements and standards set forth in *Cultural Resource Management Guideline* (NPS-28). Its purpose is to provide an overview of the park's history, identify and evaluate historic resources within their appropriate historic contexts, and update the status of historic properties already listed in the National Register of Historic Places (National Register). By identifying significant historic contexts and related historic properties, the HRS serves as a planning and resource management tool that guides the park's preparation of National Register nominations, completion of Historic Structure Reports (HSRs), development of a List of Classified Structures (LCS), and preparation of interpretive programming. While the HRS does not evaluate historic landscapes specifically, its contexts and recommendations concerning historic properties are intended to provide a basis for future NPS park-wide identification and evaluation of cultural landscapes through the Cultural Landscapes Inventory (CLI) and preparation of Cultural Landscape Reports (CLRs).

The goals of this HRS were to expand an existing draft of the HRS (prepared in 1998) into a final version that identifies and makes recommendations for the park's historic resources. The HRS encompasses all resources over 50 years of age and addresses any resources less than 50 years of age that are exceptionally significant. The following resource types were excluded from the study: archeological sites, minor elements of the road system, trails, cemeteries, remote ruins, and constituent features (such as vegetation) of cultural landscapes (although recommendations for the future study of cultural landscapes are provided). The NPS identified the following six themes as a framework for the HRS evaluations:

- Settlement and Community Development in the Great Smoky Mountains, 1790–1933;
- Extractive Industries in the Great Smoky Mountains, 1820–1944;
- Recreation and Tourism in the Great Smoky Mountains, 1900–1942;
- The Initial Development of Great Smoky Mountains National Park, 1926–1942;
- Early National Park Service Preservation Philosophy, ca. 1930–1960; and
- Mission 66 Era of National Park Service Planning and Development, 1945–1972.

With the exception of excluded resource types, the completed HRS inventory represents a comprehensive listing of historic properties in the park. The HRS evaluates over 400 park resources, including 5 historic districts and 9 individual properties currently listed in the National Register, and 15 historic districts and 9 individual properties that are determined or recommended eligible for listing in the National Register. Additionally, four potential archeological districts that incorporate buildings, structure, or visible ruins are identified for further study. The

information contained in this HRS will be used to prepare a Multiple Property Submission under which historic resources in the park will be nominated for listing in the National Register.

CHAPTER ONE: INTRODUCTION

This report presents the results of a Historic Resource Study (HRS) conducted for Great Smoky Mountains National Park (Great Smoky Mountains NP). It is the product of two efforts to identify and evaluate historic resources within the park. An initial draft of the HRS was prepared by Robert W. Blythe for the National Park Service's (NPS) Southeast Regional Office in 1998 and included the identification and evaluation of resources associated with one of three historic contexts: Settlement and Community Development in the Great Smoky Mountains (1790–1933), Recreation and Tourism in the Great Smoky Mountains (1900–1933), and the Initial Development of Great Smoky Mountains National Park (1926–1942). In 2012, the Public Archaeology Laboratory, Inc. (PAL) was hired to complete the HRS by editing and expanding on the historic contexts included in the draft and by adding three additional contexts covering Extractive Industries in the Great Smoky Mountains (1820–1944), Early National Park Service Preservation Philosophy (circa [ca.] 1930–1960), and National Park Service Mission 66 Planning and Development (1945–1972). As part of the project, PAL revisited all the resources identified in the 1998 draft report to assess their condition and conducted fieldwork to locate and record historic resources associated with the additional historic contexts.

The HRS is intended to serve as a tool for future planning, resource management, and the continuing development of interpretive programs at the park. Appendices B and C provide tables, maps, and descriptions of the historic properties listed in, or determined eligible or recommended eligible for listing in, the National Register. Appendix D lists those resources evaluated as not eligible for listing in the National Register. Appendix E provides a comprehensive listing and descriptions of all historic resources surveyed in the park, with the exception of certain types of resources excluded from the scope of the study. The information contained in this revised HRS is intended to facilitate the preparation of a Multiple Property Submission (MPS) that will include a Multiple Property Documentation Form (MPDF) and individual registration forms for properties that are eligible for listing in the National Register of Historic Places (National Register).

DESCRIPTION OF GREAT SMOKY MOUNTAINS NATIONAL PARK

Straddling the ridgeline of the Southern Appalachian Mountains that forms the border between Tennessee and North Carolina, Great Smoky Mountains NP is one of the nation's most important recreational resources (figure 1.1). Each year more than nine million people—more than twice the number of the next most visited national park—come to experience the park's majestic mountain scenery, abundant and diverse temperate zone plant and animal life, and the unique collection of rustic buildings associated with the Southern Appalachian Mountain culture that existed before the park was established in the 1930s. These outstanding scenic, scientific, and cultural qualities are recognized in the park's designations as an International Biosphere Reserve (1976) and a World Heritage Site (1983).

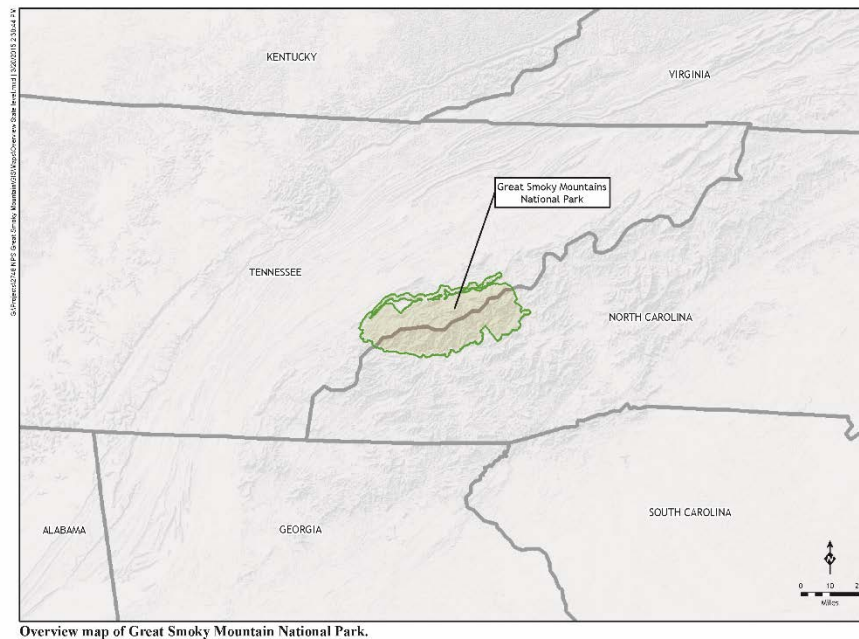


Figure 1.1. Location of Great Smoky Mountain NP in Tennessee and North Carolina

The park consists of 522,426.88 acres of land in portions of Blount, Sevier, and Cocke counties in Tennessee and Swain and Haywood counties in North Carolina (figure 1.2).¹ The nearest sizable cities are Knoxville, Tennessee, and Asheville, North Carolina. The primary access route for visitors is U.S. Highway 441 (Newfound Gap Road), which bisects the park on a northwest to southeast axis and is the only through road across the Great Smoky Mountains (a.k.a., the Great Smokies or the Smokies). Other roads allow entry to perimeter portions of the park from the north, east, and south. Chief among these are a road from Townsend, Tennessee, that splits into two branches toward Elkmont and Cades Cove, respectively; roads into Greenbrier Cove and Cosby; a road into the Cataloochee watershed; and a road from Bryson City, North Carolina, that crosses the Noland Creek watershed. Fontana Lake, a dammed portion of the Little Tennessee River, forms a portion of the park's southwestern boundary; boaters may enter the park from Fontana Lake using Eagle, Hazel, Dry and other creeks that have been broadened by the backed-up water of the lake. The Appalachian National Scenic Trail runs along the crest of the Smokies at the Tennessee/North Carolina border for about 70 miles through the park.

In physiographic terms, the Great Smoky Mountains are part of the Blue Ridge Province of the Appalachian Highlands Region, which extends from the St. Lawrence River to the Gulf Coastal Plain and is bordered by the Atlantic Coastal Plain on the east and the Central Lowland on the west. The Blue Ridge Province runs in a 550-mile-long band from south-central Pennsylvania to northeast

¹ According to the Listing of Acreage (Summary) for the year 2013 prepared by the Land Resources Division of the National Park Service and made available by the Public Use Statistics Office through the IRMA Data System at <https://irma.nps.gov/Stats/Reports/National>.

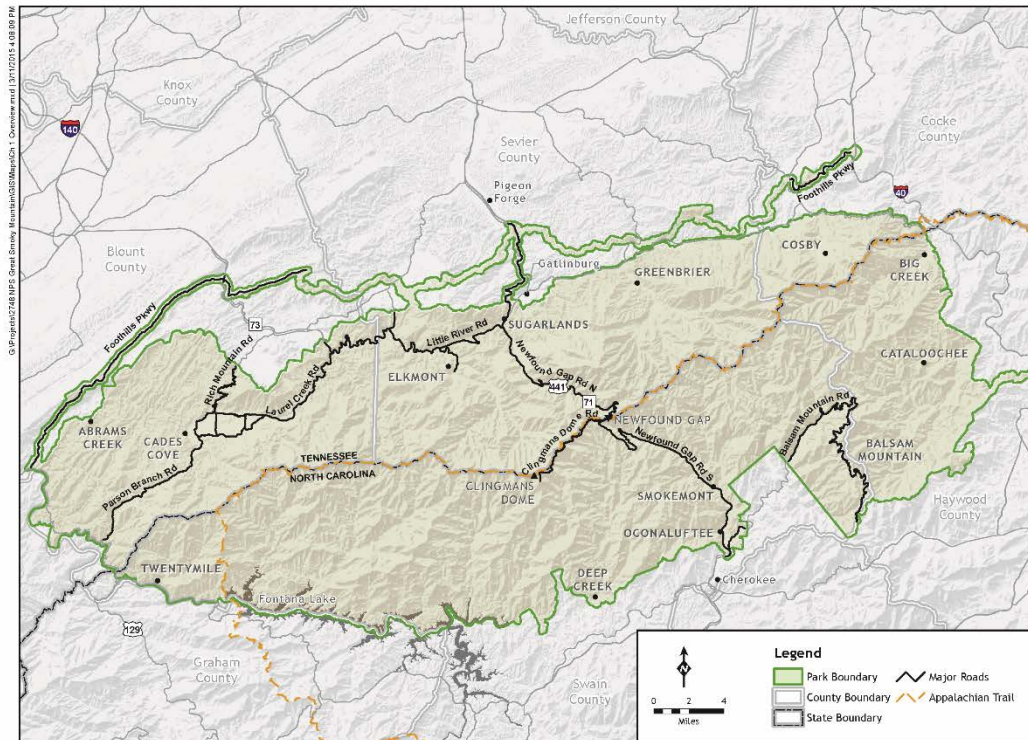


Figure 1.2. Map of Great Smoky Mountains NP showing major developed areas and roads

Georgia and is marked by steep northeast to southwest trending ridges. The province's width rarely exceeds 15 miles north of the Roanoke River but broadens to 80–100 miles in the Smokies along the Tennessee/North Carolina border. The Blue Ridge frontal scarp forms an often abrupt border with the Piedmont Province to the east. West of the Blue Ridge frontal scarp, several steep ranges proceed west to the border between the Blue Ridge Province and the Ridge and Valley Province. These main ridges and numerous shorter cross spurs compose the Unaka Range. Rivers divide the Unakas into five sections; the 70-mile-long Great Smokies range is separated from the Bald Mountains on the northeast by the Pigeon River and from the Unicoi Mountains to the southwest by the Little Tennessee River.²

The rock formations of the Smokies are from 300 million to about one billion years old. Granites, schists, and gneisses form the underlying, or basement, rock of the area. These formations are exposed only along the southeastern edge of the park at Ravens Fork, Big Cove, and Maggie Valley (outside the park boundary). The core rock group within the park is known as the Ocoee supergroup, composed of lightly metamorphosed sediments about 600 million years old. Technically, these are metasandstones and metasiltsstones. The slates, schists, and phyllites of the Anakeesta Formation are also part of the supergroup. The current physiography of the Smokies is

² Karl B. Raitz and Richard Ulack, *Appalachia, a Regional Geography* (Boulder, CO: Westview Press, 1984), 14, 40–46; Stanley J. Folmsbee, Robert E. Corlew, and Enoch L. Mitchell, *History of Tennessee*, Volume I (New York, NY: Lewis Historical Publishing, 1960), 8.

the result of several periods of faulting and uplift more than 200 million years ago, followed by weathering and erosion. The Smokies today are characterized by steep, forested ridges; rounded peaks; and deep valleys. The park's highest peak, Clingmans Dome, at elevation 6,643 feet is just 42 feet lower than the highest mountain east of the Black Hills, nearby Mt. Mitchell located in North Carolina's Pisgah National Forest. Fast-running, boulder-strewn creeks tumble down the mountain sides, forming deep, narrow valleys. Most of the creeks feed tributaries of the Tennessee River, ultimately discharging into the Gulf of Mexico via the Mississippi River. In isolated pockets are broader valleys, known locally as coves, where older, overthrust Precambrian rocks have eroded to expose "windows" of limestone, creating expanses of reasonably level ground surrounded by ridges.³

Soils in the Smokies are predominantly the brown earth soils typical of temperate deciduous forests and exhibit a neutral or alkaline pH level. Minerals that form the typical rocks of the Smokies include quartz, feldspar, mica, pyrites, and calcites. Minor amounts of iron oxides (largely limonite) and copper ore (chalcopyrite) have been commercially exploited in the past.⁴

The Great Smoky Mountains have a humid, temperate climate, with four distinct seasons. Normal minimum temperatures are around 25°F in January, with normal maximums averaging 84°F in July. The mountains form a precipitation barrier; air moving in on the prevailing westerlies rises as it reaches the mountains and discharges the bulk of precipitation on the western slopes. Rainfall is fairly evenly distributed throughout the year and ranges from 55 inches per year at Gatlinburg to 85 inches per year at Clingmans Dome.⁵

The climate and great variation in elevation found within the park support an incredibly diverse collection of fauna and flora, including many endangered species. With 130 species of trees, it has almost as many species as all of Europe. Remnants of the mighty climax forests of oak, hickory, beech, chestnut, and yellow poplar that once covered the lower elevations of the mountains persist in parts of the park, particularly east of Highway 441. Red spruce, eastern hemlocks, balsam, and Fraser firs dominate the cooler higher elevations. Staghorn sumac, witch hazel, rhododendron, and mountain laurel often form the understory. More than 2,000 fungi species, 230 lichens, 350 mosses and liverworts, and 1,300 species of flowering plants grow in the park. Mammals found in the park include the eastern black bear, white-tailed deer, and eastern bobcat, and their smaller brethren: foxes, skunks, squirrels, opossums, chipmunks, rats, mice, moles, and shrews. The park also hosts a large variety of salamander species and mollusks not found elsewhere in the world.

SUMMARY HISTORY OF GREAT SMOKY MOUNTAINS NATIONAL PARK

The geography of the Smokies had a profound influence on settlement and living patterns. Archeological investigations have produced evidence of human occupation that extends back about 9,000 years. Woodland Period sites discovered in the park indicate that some of the earliest organized horticulture in North America occurred along its river floodplains. At the time of European contact, the area was inhabited by the Cherokee Indians. The white pioneers who began to explore and settle the Smokies in the late eighteenth and early nineteenth century initially occupied the lower foothills and valleys and moved farther upward into the mountains only after the other

³ Raitz and Ulack, *Appalachia*, 41; Michael Frome, *Strangers in High Places: The Story of the Great Smoky Mountains*, revised edition (Knoxville, TN: University of Tennessee Press, 1980), 15–16; Rose Houk, *Great Smoky Mountains National Park: A Natural History Guide* (Boston, MA: Houghton Mifflin, 1993), 5–8.

⁴ Houk, *Great Smoky Mountains*, 37; Harry C. Moore, *A Roadside Guide to the Geology of the Great Smoky Mountains National Park* (Knoxville, TN: University of Tennessee Press, 1988), 17–19.

⁵ Houk, *Great Smoky Mountains*, 18–19.

lands were already taken. The rugged topography limited agricultural production, as well as communication and trade with other regions. Consequently, settlers developed a “farm-and-forest” household economy that combined market-oriented husbandry and (to a limited extent) agriculture with subsistence activities such as hunting, fishing, and small plot farming. Resources related to the distinctive Southern Appalachian Mountain culture that evolved in these circumstances are preserved in the park through its impressive collection of log houses and wood-frame churches, stores, and agricultural processing buildings.

During the early twentieth century, logging operations and other forms of extractive industry threatened to destroy the vast forests that covered the mountains. In the 1920s, preservationists in North Carolina and Tennessee joined together to advocate for the creation of a national park to protect what remained. Great Smoky Mountains National Park was authorized by legislation passed by the United States Congress and signed into law by President Calvin Coolidge on May 22, 1926. It took nearly a decade, however, before a sufficient amount of land could be obtained through private and state efforts to allow for the development of the area as a national park. President Franklin D. Roosevelt officially dedicated the park on September 2, 1940. The facilities constructed by the National Park Service in the 1930s and 1940s to accommodate its new recreational function emphatically reflect the prevailing NPS landscape and architectural design principles that initially were developed and applied at the western national parks. The Park Service’s Mission 66 program, which introduced a new design precept based on modern architecture (termed Park Service Modern) into the National Park System, added a final layer of historical development in the early 1960s.

AUTHORITY AND PURPOSE OF THE HISTORIC RESOURCE STUDY

The HRS was conducted to assist the National Park Service in meeting its obligations under Section 110 of the National Historic Preservation Act of 1966 as amended, which requires that federal agencies establish a program for the identification and protection of historic properties and ensure that such properties are maintained and managed with due consideration for preservation of their historic values. As custodian of the National Park System, the National Park Service is the steward of many of America’s most important natural and cultural resources and under its enabling legislation, the Organic Act of 1916, is charged with the special responsibility to preserve them unimpaired for the enjoyment of present and future generations. The NPS *Management Policy* regarding cultural resources states that the agency “will protect, preserve, and foster appreciation of the cultural resources in its custody and demonstrate its respect for the peoples traditionally associated with those resources through appropriate programs of research, planning, and stewardship.”⁶ The policy is carried out through the implementation of *Cultural Resource Management Guideline (NPS-28)*, which in concert with the *Secretary of the Interior’s Standards for Archeology and Historic Preservation* establishes the various types of documentation required to inform and maintain park cultural resource management programs.

Within the framework of NPS-28, the HRS serves as the basic source of information about the nature and extent of cultural resources within a park. Its purpose is to provide an overview of the park’s history and identify and evaluate historic resources within their appropriate historic contexts. The HRS synthesizes cultural resource information from various disciplines in a narrative that is designed to serve managers, planners, interpreters, cultural resource

⁶ National Park Service, *Management Policies 2006* (Washington, DC: United States Department of the Interior, National Park Service, 2006), 59.

specialists, and the interested public as a reference for the history of the resources within a park. It forms the basis for the preparation of National Register nominations, Historic Structure Reports, and List of Classified Structures (LCS) entries for those properties that meet the National Register Criteria for Evaluation. Additionally, the historic contexts and significant historic properties identified in the HRS provide a foundation for the identification of related cultural landscapes. While the HRS does not evaluate the constituent elements of cultural landscapes such as vegetation, it does identify landscapes that may require inventory or further study through the Cultural Landscapes Inventory (CLI) and/or Cultural Landscape Reports (CLRs). The HRS may also make recommendations for special history studies or other NPS efforts to enhance resource management and interpretation.

PROJECT SCOPE

The scope of the Great Smoky Mountains National Park HRS was developed by the Southeast Regional Office of the National Park Service. Its goals were to use and expand on information contained in the existing draft of the HRS prepared in 1998 to produce a final version that identifies and makes recommendations for the park's historic resources that fall within the contexts above. The following resource types were excluded from the study: archeological sites, minor elements of the historic road system, trails, cemeteries, and remote ruins.⁷ As noted above, the current study provides recommendations for future studies of cultural landscapes but does not attempt to comprehensively evaluate component cultural landscapes contained within the park. Such evaluations address both biotic features and landscape structures and are beyond the scope of this study. Many historic landscapes, both from the settlement and community development period and from the period of park development, are present within the park. Complete and certified CLI records exist for the Voorheis Estate and for thirteen component landscapes at Cades Cove. Each identified historic landscape in the park should be studied and evaluated, at a level to be determined through consultations between park management and the managers of the Cultural Landscapes program.

Finally, the contexts established by the National Park Service for this study do not cover some classes of resources located within the park, such as mid-century modern residences. Such resources identified during the preparation of this HRS are noted in the recommendations discussed in chapter 9. However, this scope did not include the comprehensive identification of excluded categories of resources that might need to be surveyed and evaluated for National Register eligibility under additional contexts in the future.

⁷ The HRS evaluates for individual National Register eligibility major roads, which are defined as those roads meeting the two following criteria: 1) public ways built for use by motor vehicles and/or horses, wagons, and pedestrians and 2) roads important within the historic contexts covered in this document because they provided critical connections between historical communities and/or park development nodes and facilities. Circulation roads within a community or park developed area, as well as short spur roads linking major roads to park facilities, are excluded from individual evaluation. Roads originally constructed as railroad roadbeds and wagon traces and former roads now managed as trails are also excluded, unless the roadways themselves have strong associations with historic contexts covered in this document. However, some roads not subject to individual National Register evaluation may be evaluated as resources within historic districts when those roads are included in NPS reports. The major roads included in this HRS are Parsons Branch/Forge Creek Road, Rich Mountain Road, Cataloochee Turnpike, Cataloochee Road (a.k.a., Cataloochee Valley Road), Little River/Laurel Creek Road, Newfound Gap Road, Clingmans Dome Road, North Shore Road, Heintooga Ridge Road, Cades Cove Loop Road, Roaring Fork-Cherokee Orchard Road (a.k.a., Roaring Fork Motor Nature Trail), and Foothills Parkway. The major roads evaluated within this HRS contain bridges, culverts, guardrails and other structures and/or features that may contribute to their significance within the contexts covered under this HRS. However, unless such structures and features are surveyed and evaluated within an existing NPS CLI, CLR, or LCS entry, they are not covered in this HRS and, therefore, need to be evaluated as components of a potential cultural landscape. Additionally, the evaluation of roads and related bridges and features as works of engineering is also excluded. Recommendations for such landscape and engineering studies are provided in chapters 8 and 9.

METHODOLOGY

The methodological approach to identifying and evaluating resources involved a series of steps consisting of research, field investigations, data analysis, historic context development, and the production of this report.

Documentary Research

The research conducted for the HRS met NPS standards for a thorough investigation and included a review of readily accessible published and documentary sources of known or presumed relevance to the study. The bibliography contained in the draft HRS served as a starting point for identifying promising sources, and a comprehensive search was performed for secondary sources published since the draft HRS was prepared. The archives of the Great Smoky Mountains NP Library were consulted to identify existing cultural resource management reports and other available primary and secondary sources. PAL also conducted a review of pertinent information available through the National Park Service's Technical Information Center (E-TIC) system and obtained information available through other online sources. PAL reviewed finding aids for the NPS administrative records pertaining to Great Smoky Mountains NP available at the National Archives at College Park, Maryland, and Atlanta, Georgia, the NPS History Collection at Harpers Ferry, and the NPS Southeast Region Archeology Center in Tallahassee, Florida. However, based on this review and on the extensive body of information available through other sources, PAL determined that trips to those institutions were unnecessary. Repositories consulted for information pertaining to extractive industries consisted of the Geological Survey files of the North Carolina Department of Environmental Resources – Division of Energy, Mineral, and Land Resources; the Forest History Society, Durham, North Carolina; and the Little River Railroad and Lumber Company Museum, Townsend, Tennessee.

During the research, PAL sought to obtain copies of the graphics referenced in the draft HRS to include them in the final document. PAL also identified historical photographic views, maps, and/or plans to illustrate the additional historic context chapters.

Field Investigation

Field investigations were carried out by a team of architectural and industrial historians who possess extensive experience in surveying and documenting historic properties. The team revisited all resources identified in the draft HRS to examine their existing conditions and provide information used to update their status. Additional resources that were not covered in the original HRS, but may be eligible for listing under one of the new historic contexts developed for the final HRS, were identified and surveyed. Each surveyed resource was located on a base map, and the following information about its current appearance was recorded: setting, physical condition, character-defining architectural features, and integrity. Where possible, at least one high-resolution digital photograph was taken of each resource. For existing or potential historic districts, the photography included general context views that show the resources in relation to one another and their surroundings, and a sketch showing preliminary district boundaries was prepared.

Determination of Historic Contexts

The development of historic contexts presented in chapters 2 through 7 constituted a major element of the study. Historic contexts are designed to describe the important historical themes, trends, and events related to the development of the park and serve as the basis for evaluating the significance of the resources identified during the fieldwork. The HRS is intended to provide historic contexts for extant historic resources within the park. These contexts were identified by the National Park

Service in consultation with the State Historic Preservation Offices of North Carolina and Tennessee and are summarized as follows:

- **Settlement and Community Development in the Great Smoky Mountains, 1790–1933** describes the patterns of early white settlement of the Smokies beginning with the displacement of the Cherokee Indians. It focuses on the establishment and growth of the communities that developed within the boundaries of the park and the economic lifeways and architecture that lent distinctiveness to the culture of the Southern Appalachian Mountain people.
- **Extractive Industries in the Great Smoky Mountains, 1820–1944** addresses the history of extractive industrial activities, including lumbering and mining, in the Smokies from the early nineteenth century to 1944. Extractive industries had a profound effect on both the natural environment and the traditional ways of life in the mountains. Exploitation of natural resources for commercial purposes was one of the primary motivations behind the movement to protect the area through its designation as a national park.
- **Recreation and Tourism in the Great Smoky Mountains, 1900–1942** describes the national trends that allowed Americans to travel for recreational purposes and the early development of the Smokies as a tourist destination during the decades immediately before and after the establishment of Great Smoky Mountains NP.
- **Development of Great Smoky Mountains National Park, 1926–1942** describes the events leading to the authorization of the park in 1926, the acquisition of park property, and the planning and development undertaken by the National Park Service using funding and labor assistance made available through the various economic relief programs of the New Deal, particularly the Civilian Conservation Corps (CCC). The contemporary visitor's experience of the park was, in large measure, shaped by the development work carried out between 1933 and 1942 and reflects the maturation of the NPS planning process and the implementation of naturalistic design by NPS architects, planners, landscape architects, and engineers.
- **Early National Park Service Preservation Philosophy, ca. 1930–1960** addresses the National Park Service's decisions regarding the treatment of the large number of historic buildings and structures that existed on properties acquired for the park. The choices made about which resources to preserve and the rationalization for moving historic structures to provide for visitor enjoyment and edification represented a controversial approach to preservation that was common during the period, but ultimately eschewed due to its impact on the historical integrity of the resources.
- **National Park Service Mission 66 Planning and Development, 1945–1972** discusses Mission 66, a ten-year, system-wide program designed to address deferred maintenance of the National Park System and to upgrade facilities for visitor comfort, education, and enjoyment. The massive program resulted in fundamental changes to the visitor experience and the construction of hundreds of new visitor centers, museums, administrative buildings, and other types of facilities that utilized modern architectural designs. Development at Great Smoky Mountains NP included a new visitor center and a viewing platform atop Clingmans Dome.

Analysis of Research Material and National Register Evaluations

Upon the completion of the research and field investigations, PAL analyzed all collected data and evaluated the recorded resources for their potential eligibility for listing in the National Register. National Register evaluations were conducted in accordance with guidance contained in National Register bulletins, including, but not limited to, *How to Apply National Register Criteria for Evaluation* (Bulletin 15); *How to Complete the National Register Registration Form* (Bulletin 16A); and *How to Evaluate and Nominate Designed Historic Landscapes* (Bulletin 18). The historic contexts, resource-specific research, and field notes regarding the condition and integrity of the resources were used to determine whether the resources met any of the National Register Criteria for Evaluation. PAL determined the areas, period(s), and level(s) of significance for the properties and applied the National Register criteria for significance. The integrity of the resources was evaluated to determine if the properties retain a sufficient amount of their historic appearance to be considered for listing in the National Register.

Historic Resource Study Report

The HRS report was prepared in accordance with the requirements and standards set forth in *Cultural Resource Management Guideline* (NPS-28). PAL revised and updated the chapters in the draft HRS and prepared new chapters for the additional contexts noted above. The National Register evaluations contained in the draft were reviewed and amended to reflect the current status of the recorded properties. National Register recommendations for all resources evaluated with respect to each of the historic contexts appear in chapter 8 of this HRS and the National Register-listed or eligible properties are summarized in appendixes B and C. The draft Management Recommendations in chapter 8 of the 1998 report (chapter 9 of this report) were updated as necessary to reflect the findings of cultural resource investigations conducted at the park since then and to present new findings from the current study.

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CHAPTER TWO: SETTLEMENT AND COMMUNITY DEVELOPMENT IN THE GREAT SMOKY MOUNTAINS, 1790–1933

The story of the settlement of the Great Smoky Mountains is one chapter in the larger story of the expansion of European settlements from the Atlantic coastal plain into the interior of the North American continent, specifically settler's penetration into the mountainous Upland South (broadly defined as the southern Appalachian Mountains). Because of geographic and cultural similarities, settlement patterns and agricultural practices in the Smokies differed only in degree from those found in other parts of this region. The particularly rugged geography of the Smokies, the area's relative isolation, and the close contact between early white settlers and the Cherokee Indians had some influence on the mountain way of life. However, most of the cultural attributes found in the mountains were preadaptive: traits already possessed by the settlers gave them an advantage in occupying a new environment. This context will outline the history of migration into and settlement of the Smokies, provide brief descriptions of individual communities, and describe the vernacular architecture and other aspects of the material culture of the settlers.

Any analysis of the settlement patterns and folkways of the Smokies is clouded by the layers of myth that surround them. Until recently, appraisals of the mountain lifestyle have clustered around two opposing myths. At one pole were those who viewed the mountain folk as nobly independent and self-sufficient "living ancestors," proud and indifferent to material wealth, speaking in Elizabethan accents and singing border ballads. At the other extreme were those who saw isolated, ignorant, inbred, socially retarded "hillbillies," prone to laziness, promiscuity, and drunkenness. Underlying both extremes was a notion of exceptionalism that set the "mountain folk" apart from other European settlements and descendant communities in the eastern United States. Ground-breaking studies such as those by Henry Shapiro, David Whisnant, Ronald D. Eller; as well as successive regional analyses by David C. Hsiung and John A. Williams; have done much to dispel the myths and explicate the functions the myths fulfilled for the larger national culture.⁸ Future scholarship may elucidate the degree to which an identifiable Appalachian culture ever existed and what its distinguishing features were. This study attempts to profit from recent scholarship to provide a more balanced account of the residents and communities of the Great Smoky Mountains.

THE CHEROKEES

Two factors—geography and a large Native American presence—delayed white settlement of the Smokies until the second quarter of the nineteenth century. Prior to the coming of the Europeans, the Cherokees, linguistically an Iroquoian nation, were the dominant tribe in the Central and Southern Appalachians. The Cherokees lived in more than forty well-organized riverside villages, each with several dozen to several hundred dwellings, in present-day east Tennessee, north Georgia, and the western portions of the Carolinas. The villages fell into four major geographic divisions: the Lower Towns along the Savannah River, the Middle Towns on the Tuckaseegee and the headwaters of the Little Tennessee, the Upper Towns on the Hiwassee, and the Overhill Towns on the lower stretches of the Little Tennessee. Practicing agriculture and hunting, the Cherokees maintained fields of corn, squash, and beans near their villages. One sizable Cherokee town, Tsiyahi, may have

⁸ See David C. Hsiung, *Two Worlds in the Tennessee Mountains* (Lexington, KY: The University Press of Kentucky, 1997); Henry Shapiro, *Appalachia on Our Mind: The Southern Mountains and Mountaineers in the American Consciousness, 1870-1920* (Chapel Hill: University of North Carolina Press, 1978); Ronald D. Eller, *Miners, Millhands, and Mountaineers: Industrialization of the Appalachian South, 1880-1930* (Knoxville: University of Tennessee Press, 1982); David E. Whisnant, *All That Is Native and Fine: The Politics of Culture in an American Region* (Chapel Hill: University of North Carolina Press, 1983); John A. Williams, *Appalachia: A History* (Chapel Hill: The University of North Carolina Press, 2002).

been located in Cades Cove, which later became part of the park. The Smokies provided the Cherokees with rich hunting and gathering grounds and a network of their trails crossed the mountains, connecting major watersheds.⁹

Among the trails that had later importance as routes of penetration for white settlers was the Indian Gap Trail, which followed the watershed of the West Prong of the Little Pigeon, passed through Indian Gap, and then descended through the Oconaluftee Valley into North Carolina. The Tuckaleechee and Southeastern Trail ran from near present-day Sevierville, Tennessee, through Tuckaleechee Cove into Cades Cove, where it split into several separate trails. One branch crossed the Smokies at Spence Field Gap and passed through the valley of Hazel Creek, while another proceeded westward out of Cades Cove through Ekaneetlee Gap, down the valley of Twenty-Mile Creek to the Little Tennessee River.¹⁰

Cherokee fur trade with whites commenced about 1650 and continued for more than one hundred years. As contacts with whites increased, diseases new to the Cherokees reduced their numbers, from an estimated 22,000 in 1650 to about 15,000 in 1775. By the 1770s, whites were moving ever closer to the Southern Appalachians from the east and north. Hundreds of whites already had illegally settled Cherokee lands west of the Appalachians in the Great Valley of East Tennessee, formed by the tributaries of the Tennessee River: the Watauga, Nolichucky, French Broad, and Holston Rivers.

WHITE SETTLEMENT

The first white settlers of the Smokies came largely from nearby areas of East Tennessee and the Carolinas that had in turn been settled in the second half of the eighteenth century.¹¹ These European-American occupants of the North Carolina Piedmont and the Great Valley of East Tennessee were part of a broad stream of internal migration originating in the Midland cultural hearth (or core) area. Of the three major cultural hearth areas in colonial America, the Midland area (southeastern and south-central Pennsylvania and adjacent areas of New Jersey and Maryland) had by far the greatest impact on the Upland South. The New England hearth area, which sent migrants throughout the Great Lakes region, had almost no impact on the Appalachian South. A few settlers from the Tidewater hearth area of coastal Virginia and North Carolina moved west and mingled with the stream moving south from the Midland core area.¹²

Beginning about 1725, as population and land values increased in the Midland hearth area, single families and small groups migrated out. Deterred from moving due west by the presence of Native Americans and the French, the migrants moved southwestward to form new settlements in the Upland South following a long chain of paths and roads through bottomlands that threaded through the ridge-and-valley terrains of Maryland, Virginia, and Tennessee. These settlers traveled first through the Shenandoah Valley of Virginia. Some settled in Virginia, while others either entered the Carolina Piedmont through a gap in the Blue Ridge at Roanoke or continued to the southwest into the Great Valley of East Tennessee, forming settlements along the Holston, Watauga, French Broad, and Nolichucky Rivers. A smaller, later stream of migration came from the coastal areas of Virginia and the Carolinas and made its way westward into the Piedmont and the mountains. The settlement frontier did not proceed in a solid front but was intermittent and discontinuous. By 1800, the general

⁹ R. S. Cotterill, *The Southern Indians: The Story of the Civilized Tribes Before Removal* (Norman, Okla.: University of Oklahoma Press, 1954), 5; Charles C. Royce, *The Cherokee Nation of Indians* (Chicago: Aldine Publishing, 1975), 12-16; T. Stell Newman, "An Overview of the Probable Indian Cultural History, Great Smoky Mountains National Park" (typescript, n.d., National Park Service, Denver Service Center, Denver, CO), 10-11.

¹⁰ H. C. Wilburn, "The Indian Gap Trail" (typescript, 1940, Great Smoky Mountains National Park, Gatlinburg, TN), 1-3.

¹¹ Tennessee was part of North Carolina until 1784; undertook various secession and reintegration movements with that state between 1784 and 1795; and was admitted to the Union as the sixteenth state in 1796.

¹² Lix, "Short History," 25; Raitz and Ulack, *Appalachia*, 115-17.

settlement frontier split at the Smokies, a relatively inaccessible region of narrow valleys and small coves that still retained a substantial Cherokee presence (figures 2.1 and 2.2).¹³

Numerically dominating the migration to the Upland South were individuals of Celtic ancestry—Scotch-Irish, Scots, and Welsh—and Englishmen from the “Celtic frontier,” those areas of England bordering Scotland and Wales. Many historians have emphasized the role of the largely Presbyterian Scotch-Irish, some 250,000 of whom immigrated to the American colonies between 1725 and 1775, in settling the Upland South.¹⁴ Most of this Scotch-Irish immigration was initially to the Midland cultural hearth area. Other Celts and those from the Celtic frontier shared many cultural characteristics, such as the dispersed farm and free-range grazing, with the Scotch-Irish. McDonald and McWhiney have estimated that as much as 70% of the population of the Southern Appalachian area in 1800 shared this Celtic or border-Celtic cultural heritage. Germans from the Palatinate of southwestern Germany formed another major component of the migration from the Midland cultural hearth area. Approximately 200,000 Palatinate Germans arrived in Delaware Valley ports before the Revolutionary War.¹⁵ Cultural characteristics of the Scotch-Irish, Germans, and other ethnic groups cross-pollinated in the core area, and migrants of Celtic ancestry became the major transmitters of these characteristics throughout the Upland South.¹⁶

Among the cultural attributes typical of the Midland hearth area were a number that proved ideally suited to the settlement of the Appalachian South, with its heavy forest cover and narrow valleys unsuited to intensive row-crop agriculture. Chief among these were the kinship-based dispersed settlement; a generalized stock-raising, farming, and hunting economy; great adaptability in the choice of crops; evangelical Protestantism with strong congregation autonomy; and the courthouse-town system. A specific contribution of the Scotch-Irish and other Celts was the Celtic dispersed farm, characterized by free-range livestock grazing and the kitchen garden. Before major migration from the core area occurred, all ethnic groups had adopted horizontal, corner-notched log construction, probably of Germanic origin, which spread throughout the Upland South.¹⁷ Although the southern mountain environment had some influence on cultural patterns, most cultural traits were in place in the core area and were brought along in the great wave of migration. The suitability of these traits to the mountain environment ensured their widespread use and persistence.¹⁸

Celtic and German migrants tended to form separate settlements due to different religious and geographic preferences. However, these preferences were not rigid determinants – some intermarriage occurred and there were always exceptions. Those of Celtic ancestry preferred settling

¹³ Raitz and Ulack, *Appalachia*, 94-100; 117; Carl Bridenbaugh, *Myths and Realities: Societies of the Colonial South* (Baton Rouge, LA: Louisiana State University Press, 1952), 122-24; Raymond D. Gastil, *Cultural Regions of the United States* (Seattle, WA: University of Washington Press, 1975), 169-70; Williams, *Appalachia: A History*, 30-39.

¹⁴ The Scotch-Irish, sometimes referred to as the Scots-Irish, were lowland Scots and northern English who settled the Ulster provinces of Northern Ireland at the behest of the British crown in the late seventeenth century. Population pressures and religious restrictions in Ulster produced a large outmigration of these generally Protestant individuals to America in the eighteenth century. During the eighteenth century, migrants from Ulster generally referred to themselves simply as “Irish”. Use of the term “Scotch-Irish” extends back to the late, seventeenth century, but was popularized in the United States in the nineteenth century by the Ulster migrants’ decedents, who wished to distinguish themselves from more recent Irish-Catholic immigrants. Williams, *Appalachia: A History*, 43-44.

¹⁵ These immigrants were called the “Pennsylvania Dutch” because their English-speaking neighbors confused the German word for “German” (Deutsch) with the English word for Netherlander. Williams, *Appalachia: A History*, 38.

¹⁶ Forrest McDonald and Grady McWhiney, “The South from Self-Sufficiency to Peonage,” *The American Historical Review* 85 (December 1980): 1107-8; Patricia D. Beaver, “Appalachian Cultural Adaptations: An Overview,” in *Cultural Adaptations to Mountain Environments*, ed. Patricia D. Beaver and Burton L. Purrington (Athens, GA: University of Georgia Press, 1984), 78; Milton Newton, “Cultural Preadaptation and the Upland South,” in *Man and Cultural Heritage, vol. 5 of Geoscience and Man*, ed. H. J. Walker and W. G. Haag (Baton Rouge, LA: Louisiana State University School of Geoscience, 1974), 148-50.

¹⁷ Most scholars accept the Germanic origin, although some have argued for a seventeenth-century Swedo-Finnic origin. See discussion in the log cabins section below.

¹⁸ Newton, “Cultural Preadaptation,” 152; Raitz and Ulack, *Appalachia*, 119-21; Williams, *Appalachia: A History*, 38.



Figure 2.1. Detail from the 1814 state map of North Carolina showing future location of Great Smoky Mountains NP, indicated as "Haywood" (Samuel Lewis, *North Carolina from the Latest Surveys*, Philadelphia, PA: Mathew Carey, 1814. Courtesy of the State Archives of North Carolina).



Figure 2.2. Detail from the 1818 state map of Tennessee showing future location of Great Smoky Mountains NP in Blount, Sevier, and Cocke counties (John Melish, *Map of Tennessee*, Philadelphia, PA: John Melish and Samuel Harrison, 1818. Map reproduction courtesy of the Norman B. Leventhal Map Center at the Boston Public Library).

in the heavily forested upper valleys and in mountain-ringed coves, where wild game and mast (windfall acorns and other nuts) for livestock grazing were abundant. Germans, with a preference for intensive mixed agriculture in more open country and a stronger orientation toward town life, were more likely to settle the broader lower valleys in dispersed homesteads, particularly in North Carolina. Members of all ethnic groups migrated in single-family units or groups of two to three families and usually were joined by additional related families and friends once a foothold had been gained. In some instances, the possible presence of iron ore may have also provided an inducement to settlement for knowledgeable forge masters.¹⁹

Excepting some more strictly organized German settlements, the typical early settlement in the Southern Appalachians was the kinship-linked dispersed hamlet. Rather than establishing an isolated farmstead miles from the nearest neighbor, a family settled with a handful of others, often related by blood or marriage, in a cluster defined by geographic features (e.g., a valley, cove, or gap), for mutual support and protection. Gene Wilhelm, Jr., has identified six folk settlement types in the Virginia Blue Ridge: the gap, cove, ridge, meadow, and two varieties of hollow settlement. These types were established in the Virginia Blue Ridge area between 1730 and 1800. Available evidence indicates that they then spread throughout the Southern Appalachians, including the Great Smoky Mountains, in the later eighteenth and early nineteenth centuries. Although building construction techniques changed with time, the basic spatial organization of settlements remained essentially constant.²⁰

In the Great Smokies, because steep mountain ridges separated watersheds, hollow and cove settlements were by far the most numerous, and were the basic community unit. Gap, ridge, and meadow settlements were rare in the Great Smokies. The first settlers chose land near the mouth of the creek valley; usually in the coves. Later arrivals moved farther up into hollows, narrow valleys further up a watershed. Most hollow settlements were linear, with farmsteads extending up the watercourse at one-quarter to one-half-mile intervals. If additional tributaries, or branches, with arable lands branched off from the main stream, a fan-shaped settlement pattern evolved. Cove settlements featured farmsteads at the edge of the basin, close to the surrounding hillsides, leaving the interior for cultivation and creating an oval distribution pattern. Once the population grew large enough to support community functions, settlers built churches, mills, schools, and stores, usually clustered at the mouth of the hollow or cove. When a given region reached a sufficient population density, a new county would be established, with the ideal size of a county being predicated on the distance that a person could ride on horseback (from their residence to the county seat).²¹

Settlers in the hollows and coves of the Great Smoky Mountains, as elsewhere in the Upland South, overwhelmingly practiced stock-raising and diversified small-scale agriculture, supplemented by extensive hunting, gathering (nuts, berries, medicinal plants), and fishing – a farm-and-forest economy. Landholdings were generally 150 or fewer acres. From 20 percent to 40 percent of the total acreage was cleared for crops and pasture, and the rest remained in forest. Many farmers practiced patch farming, clearing fields for temporary use, then abandoning them and clearing new ones from their forest acreage when yields declined. Upwards of 80% of the farmers in the mountain areas owned their own land in the first half of the nineteenth century. Property lines typically ran to the tops of ridges, but almost everywhere the hillsides were considered communal land where all could hunt and graze livestock. Instead of fencing grazing land, farmers fenced their gardens and corn patches to keep livestock out. Most production was for home consumption, with cash income coming largely from the sale of livestock. Pelts, butter, eggs, and marketable herbs and roots such as

¹⁹ Raitz and Ulack, *Appalachia*, 115-17; Newton, "Cultural Preadaptation," 152.

²⁰ Raitz and Ulack, *Appalachia*, 121; Gene Wilhelm Jr., "Folk Settlements in the Blue Ridge Mountains," *Appalachian Journal* 5 (Winter 1978):204-7; Newton, "Cultural Preadaptation," 152.

²¹ Wilhelm Jr., "Folk Settlements," 219-36; Eller, *Miners, Millhands, and Mountaineers*, 8; Williams, *Appalachia: A History*, 113-114, 137.

ginseng often were traded at country stores for sugar, coffee, salt, and other items. Corn was the staple grain crop, but oats, wheat, hay, sorghum, rye, and potatoes were also grown. Mountain folk were adaptable, and switched to new crops when market incentives changed. To supply the table, almost every farm had a kitchen garden containing onions, lettuce, cabbages, Irish potatoes, sweet potatoes, green beans, sweet corn, tomatoes, and turnips. Many had a few fruit trees, usually apple, a grape arbor, and bee hives.²² As in many areas of the Upland South, a portion of the corn crop in the mountains was distilled into whisky, the sale of which was an additional source of cash.

The raising of livestock, especially hogs, was extremely important in the Upland South prior to the Civil War. Meat provided a large proportion of the average diet, and a substantial portion of cash income came from selling stock each fall. From April to October, hogs, cattle, and sheep were allowed to roam free in the woods and clearings. The vast oak-hickory-chestnut forests provided abundant amounts of mast to feed the livestock. Owners marked the ears of their stock for identification and visited them once a week to give them salt (an important dietary supplement) and keep them gentle. In the fall, farmers rounded up the stock and drove them in large herds to markets in the Piedmont or as far away as Charleston. The plantation economy of the Piedmont and coastal areas provided a ready market for livestock. Farmers in more productive coves and lowlands capable of producing grain surpluses also profited from selling fodder to the drovers as they passed through with their herds.²³ The Indian Gap Trail, which crossed the Smokies via the watersheds of the West Prong of the Little Pigeon River and the Oconaluftee, was an important drovers' route prior to the Civil War.

Because the largely self-sufficient, owner-occupied family farm was the basic economic unit, a relatively open and egalitarian social structure characterized the settlements of the Great Smokies, as in other mountain communities. Self-reliance and mutual assistance in times of need were the lodestars of community life and position in the community often depended less on wealth than on status and behavior. Lawyer-merchant elites existed in the mountain counties, but members of these elites resided mostly in the county seats, where they had limited influence in the mountain settlements. Instead, the fundamental cleavage was between the respectable and the disreputable. In this vein churches, mostly Baptist, Methodist, and Presbyterian (but limited to Baptist and Methodist in the communities now within the Great Smoky Mountains NP), were at the center of community life. In the Smoky Mountain community of Cades Cove, for example, a sub-community of moonshiners formed at the southwest edge of the cove in Chestnut Flats. Respectable cove residents shunned the denizens of Chestnut Flats. Independence and freedom from deadening routine, at least for adult males, were highly valued, and everywhere a strong attachment to the land and the home place was evident.²⁴

The degree of isolation of mountain communities in the nineteenth and early twentieth centuries has often been exaggerated, both by romantics who saw the mountaineers as forgotten throwbacks to a noble pioneer past and by denigrators who saw ignorance and vice flowing from isolation. In practical terms, the lack of good roads or other means of transportation prior to the 1920s and 1930s

²² Eller, *Miners, Millhands and Mountaineers*, 16-19; Frank L. Owsley, *Plain Folk of the Old South* (Baton Rouge, LA: Louisiana State University Press, 1949), 24; Beaver, "Appalachian Cultural Adaptations," 80-81; John S. Otto, *The Southern Frontiers, 1607-1860: The Agricultural Evolution of the Colonial and Antebellum South*. (New York, NY: Greenwood Press, 1989), 5-6; Williams, *Appalachia: A History*, 125-126.

²³ Frank L. Owsley, "The Pattern of Migration and Settlement of the Southern Frontier," in *The South Old and New: Selected Essays of Frank Lawrence Owsley* (Athens, GA: University of Georgia Press, 1969), 13-14; Donald Edward Davis, *Where There Are Mountains: An Environmental History of the Southern Appalachians* (Athens, GA: University of Georgia Press, 2005), 138-142; Eller, *Miners, Millhands, and Mountaineers*, 19-21; McDonald and McWhiney, "The South," 1105-7; Williams, *Appalachia: A History*, 114-115.

²⁴ Eller, *Miners, Millhands, and Mountaineers*, 9-12; McDonald and McWhiney, "The South," 1102-3; Durwood Dunn, *Cades Cove: The Life and Death of a Southern Appalachian Community, 1818-1937* (Knoxville, TN: University of Tennessee Press, 1988), 195-97.

did make travel in the mountains difficult. However, all but the most isolated residents made trips to outside communities. For example, for the communities of the Great Smoky Mountains, regular trips to markets in towns like Knoxville and Maryville on the Tennessee side and Bryson City and Waynesville in North Carolina were a staple. The mail brought letters and newspapers from outside, and telephone service came to even a relatively remote place like Cades Cove in the 1890s. As logging and mining infrastructure penetrated the region, these connections would multiply. Even prior to the twentieth century, however, the physical isolation of mountain communities was balanced by economic webs of interdependence that linked these areas with county seats and the outside world. Instead of a polarized scheme where communities were either “isolated” or “connected”, communities are now understood to have existed historically within a more complex matrix where transportation, economics, communication, and other factors played a role in determining their relative degree of connectedness.²⁵

The traditional ways of life in the Upland South began to change after the Civil War for several reasons. These changes affected the Great Smokies unevenly, depending on their relative geographic and economic isolation. Communities such as Cades Cove, which had a higher degree of connectedness to outside regions, suffered more than the high mountains, which were always more self-sufficient and somewhat less dependent on outside markets than lower-lying areas. Still, many families and some whole communities faced challenges caused by outside forces and the limited availability of arable land in the Upland regions. The war disrupted market relationships and reduced livestock herds, which had to be slowly rebuilt. With the end of slavery, plantation owners no longer bought livestock in large quantities, depriving the Upland livestock producers of a ready market. When the economy of the South began to recover during the late nineteenth century, the meat packing industry in the Midwest provided strong competition for southern stock raisers. Local fencing laws in the South also made long stock drives less feasible. Unable to readily sell their herds for good prices, mountain folk faced the difficult task of coaxing more production from their small patches of cropland. Once their children came of age to start their own families, many were forced to settle on marginal lands far up the mountain valleys or eke a living from a portion of an established farm after it was divided among their siblings. The Civil War also changed social attitudes towards change and outside influence, as communities such as Cades Cove that were subject to interference and outright attack, as well as internal divisions, during the conflict became inward-looking and distrustful of change and outsiders.²⁶

The most dramatic changes to the life ways of many Upland South communities were wrought by extractive industries, such as logging and mining, and other forms of industrial production during the period from about 1880 through 1920. Those developments altered traditional economic patterns and often resulted in a concomitant breakdown of the social order in the pre-industrial mountain communities they touched through a combination of ills, including out-migration and farm abandonment, usurpation of property rights, environmental exploitation and despoliation, a dependency on wage labor that altered the traditional ideal of agrarian self-sufficiency, and a fragmenting class consciousness.²⁷

Settlements within the Great Smoky Mountains

Within the area that eventually became the park were two major cove settlements, Cades Cove and Big Greenbrier Cove in Tennessee, and many hollow or valley settlements. Important hollow

²⁵ Eller, *Miners, Millhands, and Mountaineers*, 12-16; Dunn, *Cades Cove*, 85; Hsiung, *Two Worlds*, 10-15.

²⁶ Mark T. Banker, *Appalachians All: East Tennessee and the Elusive History of an American Region* (Knoxville, TN: The University of Tennessee Press, 2010), 70; McDonald and McWhiney, “The South,” 1115-18.

²⁷ Eller, *Miners, Millhands and Mountaineers*, 225-242. The history of development of extractive industries in the area of Great Smoky Mountain National Park is provided in chapter three.

settlements were Fork of the Rivers and Sugarlands on the Little Pigeon River, Cosby Creek, and Greenbrier, Tennessee; and Little Cataloochee and Cataloochee on Cataloochee Creek²⁸, Ravensford on the Raven Fork, Oconaluftee, Deep Creek, Forney Creek, Hazel Creek, North Carolina. As was typical throughout the Appalachian South, pioneers first claimed the somewhat broader, more level lower valleys. Latecomers and the children of original settlers took land farther up the valleys. Most settlers purchased land directly from the states of North Carolina and Tennessee. Many were squatters at first and secured title some years later. The first permanent white settlement within the park boundary was probably in the lower Oconaluftee Valley on the North Carolina side in the mid-1790s. At about this same time, settlers established themselves at the site of Gatlinburg, Tennessee, just outside the north park boundary. Families were soon pushing up the West Prong of the Little Pigeon to the Sugarlands Valley and beyond. Most sizable valleys within the park were settled by the 1830s or 1840s. Precise dates of settlement are frequently difficult to establish because many settlers occupied land for a number of years before acquiring legal title to it and maps for the period are meager in detail (figures 2.3 and 2.4).²⁹

The following brief history of the former communities within the park boundary begins with the Oconaluftee Valley and proceeds clockwise through the major watersheds within the park. Only enough information is provided to give a sense of each community and its characteristics. Generally, more attention is devoted to communities like Cades Cove where a number of resources survive than to communities where most traces of settlement have vanished.

Oconaluftee Valley (Swain County, NC). The Oconaluftee River begins in the high elevations of the Smokies just below Newfound Gap. Before reaching the park boundary, it is joined by the Bradley Fork and the Raven Fork. Below Bradley Fork, the Oconaluftee forms a fertile and relatively broad valley, by Smokies standards. As mentioned above, the Indian Gap Trail ran through the Oconaluftee Valley. John Mingus, a German emigrant from Saxony, settled the lower valley before 1800. Three of his sons took land on the Raven Fork, and one, Dr. John Mingus, acquired property along Mingus Creek. Others settlers arrived between 1800 and 1820. Abraham Enloe in 1803 purchased a 250-acre farm that included the site later chosen for the Oconaluftee Ranger Station. Other early residents were Ralph Hughes, Samuel Sherrill, Isaac Bradley, Samuel Conner, Robert Collins, and John Beck.³⁰

Two community centers evolved in the Oconaluftee Valley: Ravensford at the mouth of Raven Fork and Bradley Town (later renamed Smokemont), about five miles upstream, where the Bradley Fork joins the Oconaluftee from the north. Smokemont area residents organized the Oconaluftee Baptist Church in 1836, meeting in private houses until the erection of a church building. In the 1830s, area residents attempted to improve portions of the Indian Gap Trail as the Oconaluftee Turnpike. Although improvements proceeded slowly, the road over the mountains was for a time an important route for livestock drives to the Piedmont and for bringing other items to market.³¹ In 1886, Dr. John Mingus hired a Virginia millwright, Sion Thomas Early, to construct a gristmill on his property on Mingus Creek. The new medium-sized, two-and-one-half-story turbine mill replaced an earlier mill

²⁸ This area is often referred to as a "cove".

²⁹ Wilma Dykeman and Jim Stokely, *Highland Homeland: The People of the Great Smokies*, (Washington, DC: National Park Service, 1978), 43-45; Robert S. Lambert, "The Pioneer History of the Great Smoky Mountains National Park: A Report to the Superintendent Based upon Documentary Sources" (1957, typescript, Great Smoky Mountains National Park, Gatlinburg, TN), 12-15, 24-31.

³⁰ Robert S. Lambert, "The Oconaluftee Valley, 1800-1860: A Study of the Sources for Mountain History," *The North Carolina Historical Review* 35 (October 1958): 419, 424; Lambert, "Pioneer History," 22-26.

³¹ Lambert, "The Oconaluftee Valley," 423; Carl G. Lambert, "The Oconaluftee River and the First White Settlers," in *The Heritage of Swain County, North Carolina* (Winston-Salem: Hunter Publishing, 1988), 4-7.

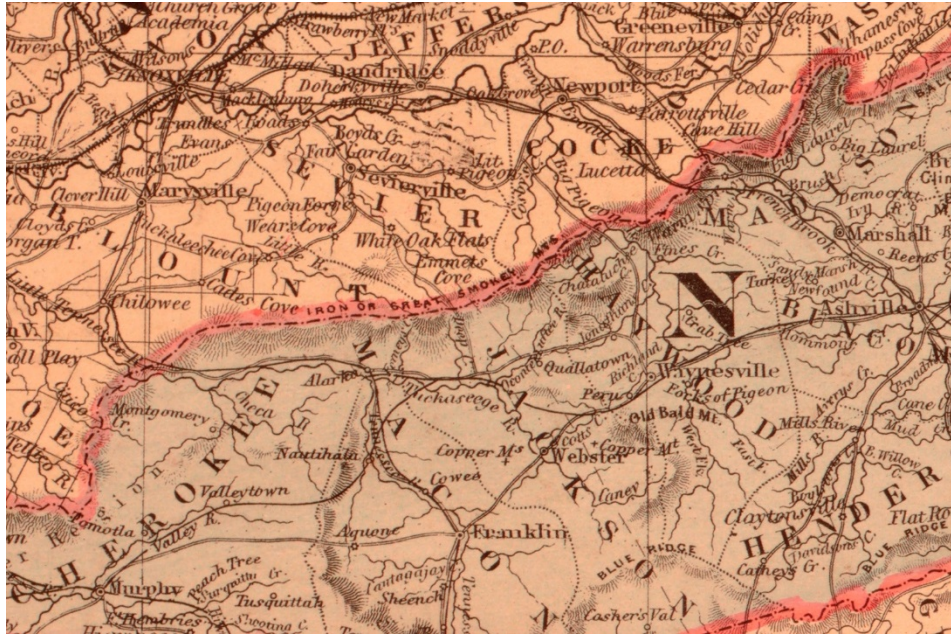


Figure 2.3. Detail from 1861 state map of North Carolina (Joseph Hutchins Colton, *J.H. Colton's Topographical Map of North and South Carolina*, New York, NY: Lang & Laing, 1861. Map reproduction courtesy of the Norman B. Leventhal Map Center at the Boston Public Library).

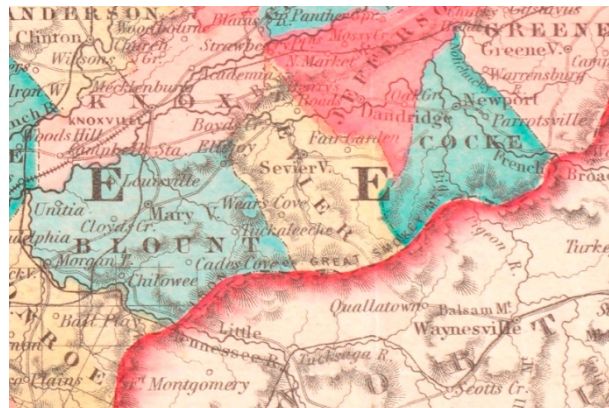


Figure 2.4. Detail from 1856 map of Tennessee (Joseph Hutchins Colton, *Kentucky and Tennessee*, New York, NY: J.H. Colton & Co., 1856. Map reproduction courtesy of the Norman B. Leventhal Map Center at the Boston Public Library).

on the site (see below). The mill remained in the Mingus-Floyd family and operated until the middle 1930s, when the park acquired it. Both Ravensford and Smokemont in Swain County, North Carolina, hosted substantial logging activity and infrastructure in the early twentieth century. This history is discussed in chapter three.³²

Deep Creek (Swain County, NC). Deep Creek, and its tributary Indian Creek, lie a few miles west of the Oconaluftee. Deep Creek joins the Tuckaseegee River at Bryson City, just south of the park boundary. Permanent residents were present on Deep Creek by 1830 and probably considerably earlier. The Wiggins, Shuler, and Millsaps families were among the earliest arrivals. James Wiggins

³² Ed Trout, "Milling in the Smokies" (typescript, 1978, Great Smoky Mountains National Park, Gatlinburg, TN), 44-45.

operated a gristmill on Deep Creek as early as 1831. As in the Oconaluftee Valley, offspring of the first settlers established homesteads farther up Deep and Indian Creeks in the mid-1800s. No structures from the settlement era survive in this watershed.³³

Hazel Creek (Swain County, NC). The next watershed west of Deep Creek is Hazel Creek, named for the hazelnut bushes that grew along its banks. Hazel Creek and the nearby watersheds of Eagle Creek, and Twentymile Creek in the southwestern part of Great Smoky Mountains National Park were not added to the park until the 1940s, when the Tennessee Valley Authority (TVA) dammed the Little Tennessee River at Fontana. The TVA purchased the land that would be inundated by Fontana Lake and additional acreage aggregating 44,170 acres that it donated to the park.³⁴ Hazel Creek rises high in the mountains, just southwest of Siler's Bald. Major tributaries are Bone Valley Creek, Walker Creek, Sugar Fork, Shehan Branch, and Cable Branch, all entering from the northwest. Hazel Creek now empties into Fontana Lake of the Little Tennessee River. The first settlers were Moses and Patience Proctor, who came originally from North Georgia and resided briefly in Cades Cove before settling near the mouth of the Shehan Branch in the 1830s. They were soon joined by another family from Cades Cove, Samuel and Elizabeth Cable and their seven children. Other families arrived from the North Carolina side using dirt tracks and old Indian trails. By 1860, at least four families, the Proctors, Cables, Welches, and Bradshaws, were resident on the creek, all comparatively close to its outlet. After the Civil War, more settlers arrived and took land farther up Hazel Creek and its tributaries. John Craten "Crate" Hall arrived in the 1870s and eventually built an impressive two-story house of poplar logs on Sugar Fork, the earliest structure still standing in the Hazel Creek watershed.³⁵

By 1900, Hazel Creek was well settled, and two community centers had emerged: Medlin at the mouth of Sugar Fork and Proctor at the mouth of Shehan Branch (Possum Hollow). Turn-of-the-century Hazel Creek had four Baptist church/school buildings at Bone Valley, Walkers Creek, Cable Branch, and Proctor, as well as three general stores, and two post offices operating out of stores, at Proctor and Medlin. The logging activities of the William M. Ritter Lumber Company (1903-1926) would dramatically transform the Hazel Creek communities, particularly Proctor, where a large company town was established (see chapter three).

Hazel Creek was also home for several years to author Horace Kephart, the most famous chronicler of the Smokies. Kephart lived in a cabin on Little Fork of Sugar Fork from 1904 to 1907, gathering material for his classic portrait of the Appalachian South, *Our Southern Highlanders*, published in 1913.³⁶

Cades Cove (Blount County, TN). Cades Cove, a broad, level, oblong area of approximately 5,000 acres at the west end of the park, was by far the most populous settlement within current park boundaries. Eighteen branches feed Abrams Creek, which runs through the cove from east to west, and mountain ridges almost completely encircle the cove. To the north, Rich Mountain separates Cades Cove from nearby Tuckaleechee Cove (outside the park boundary), and several Cherokee trails once connected the two coves across Rich Mountain and Cades Cove Mountain. With its expanse of level, fertile land and abundant springs and creeks, Cades Cove was certain to attract settler interest. A year before the 1819 Treaty of Calhoun extinguished Cherokee title to the cove, John and Lucretia Oliver moved there from Carter County in northeast Tennessee. The Olivers obtained legal title to their land in 1826. In 1821, William Tipton began buying up much of the cove's

³³ Lambert, "Pioneer History," 27-28; John Preston Arthur, *Western North Carolina, A History, 1730-1913* (1914; reprint, Spartanburg, NC: The Reprint Co., 1973), 208.

³⁴ Lix, "Short History," 70; Superintendent's Annual Report, 1950.

³⁵ Duane Oliver, *Hazel Creek From Then Till Now* (Maryville, TN: Duane Oliver, 1989), 4-6, 8-11, 39.

³⁶ Oliver, *Hazel Creek*, 12; Lambert, "Logging in the Great Smoky Mountains," 40-42; Frome, *Strangers in High Places*, 156-57.

land and reselling it to settlers. Tipton was also an experienced iron worker, and iron ore deposits in the cove were also an enticement to knowledgeable settlers such as Tipton (see the iron mining context in chapter three). Joshua Jobe and many friends and relatives from Carter County arrived beginning in 1821. Robert Shields and Pennsylvania-born Peter Cable both arrived in 1825. Early settlers took land in the northeast section of the cove, which was higher and better drained. By the time the Cades Cove Baptist Church was organized as a branch of Wear's Cove Church in 1827, a community had formed.³⁷

Attracted by the arable land and other economic opportunities, and aided by an expanding road network, settlers flowed into Cades Cove for three decades, producing a population of 671 by 1850. In the late 1820s, Peter Cable had drained the swampy lower sections of the cove by constructing dikes and log booms, opening more land for settlement. Circa 1821, the Tipton family established a forge on Forge Creek. Daniel D. Foute would acquire these works in 1837 and operate them as the Cades Cove Bloomery Forge. The forge smelted iron from local ores and provided employment for a few residents (see chapter three). Agriculture, however, was the basis of the cove's economy. Land was cleared in the middle of the cove for pasture and crops, and the surrounding hillside forests provided abundantly for the settlers, supplying them with building material, game for the table, mast for livestock grazing, and medicinal herbs and roots. Nearby balds, open expanses of meadow on mountain tops, also provided good pasturage. Throughout the nineteenth century, residents used notched-log construction for houses, barns, and outbuildings; a number of fine examples remain as exhibits in the cove. By 1850, five wagon roads were developed into cove, including Cooper Road (1830–1834), Laurel Creek Road (1836), Parson's Branch Road (1861), the Anderson Road (currently Bote Mountain Road, 1830s) to the southeast, and Rich Gap Road (1840, a.k.a., Rich Mountain Road, an improved Cherokee trail to Tuckaleechee Cove).³⁸

With its greater tillable acreage and relatively dense road network, Cades Cove was probably more market-oriented than many mountain communities. Some corn was milled in the cove, at first with tub mills. Frederick Shields built the first overshot wheel mill in the 1840s, and John P. Cable built a large overshot wheel mill at the west end of the cove in the 1860s, which stands today as a notable reminder of agricultural patterns in the community (see discussion of mills below). Farmers regularly made the two-day trip by wagon to Knoxville or a shorter trip to Maryville to sell crops and returned with store-bought goods. Residents also traded at Snider's Store in Tuckaleechee until 1873, when the first store opened in the cove.³⁹

Cades Cove's population declined substantially in the 1850s, as many residents sought opportunities in newly opened land west of the Mississippi River. After reaching a population low of 296 in 1860, the community slowly rebuilt during the difficult period of Reconstruction and thereafter. Little immigration occurred following the Civil War, and the ties of kinship strengthened as a sense of community became more firmly established. Life in Cades Cove, which resembled life in other rural Tennessee communities, did not remain static. Residents showed themselves to be highly adaptable, adopting new farming techniques when they fit their needs and changing to new crops when it was

³⁷ Dunn, *Cades Cove*, 1-16; Dykeman and Stokely, *Highland Homeland*, 45.

³⁸ Historical nomenclature for roads along or near the Rich Mountain Road alignment conflict in secondary reports. According to the Historic American Engineering Record (HAER) documentation for roads in the Smokey Mountains, an unidentified wagon road was authorized ca. 1840 through Indian Grave Gap. This was replaced with the present Rich Mountain Road in 1920. According to the CLI for the Cades Cove Landscape, the nineteenth-century road was called Rich Mountain Road and its 1920s replacement was called Rich Gap Road. Rich Mountain Road is the nomenclature used on road maps for the current active road alignment (established in 1922) and is therefore the name used in this document. Dunn, *Cades Cove*, 20, 65-69, 242-243; Maher and Kelleher, "Great Smoky Mountains National Park Roads & Bridges, Gatlinburg Vicinity, Sevier County, TN", 20-21, 62; NPS, *Cultural Landscapes Inventory: Cades Cove Landscape*, 24-26, 29, 32, 38.

³⁹ Dunn, *Cades Cove*, 81-82, 183.

desirable. Although travel was slow and at times difficult, residents were connected to the outside world in many ways.⁴⁰

By 1900, lumber companies were moving into the Smokies to clear cut its forests. Some Cades Cove residents sought jobs with timbering and sawmilling operations, but most continued to make their livelihoods through grazing and farming. The proliferation of sawmills made milled lumber readily available, and many residents built framed houses. In 1922, Rich Mountain Road was partially re-routed and fully paved between Cades Cove and Tuckaleechee Cove, giving residents better access to markets and making it easier for tourists to enjoy the cove and surrounding scenery. A spate of tourist- and recreation-oriented development followed in the cove to take advantage of the increase in visitors, including resident John Oliver's construction of a tourist lodge in 1928. As of that year, Cades Cove was the largest settlement within the future park's authorized boundary, with 110 families and approximately 600 people.⁴¹

Following the incorporation of Cades Cove into Great Smoky Mountains NP, there was some use of lands in the area for agriculture, specifically hay and cattle grazing, until circa 1940. After some discussion, the National Park Service in the 1940s decided to retain a few log structures and others in the cove and make it an outdoor museum of mountain culture that interpreted the "pioneer" or early stage of settlement. Because emphasis was on the "best" examples of notched log construction, the Park Service removed frame buildings and many farm outbuildings, moved others within the cove, and rebuilt others. The details of these changes are provided in chapter six, under the context of early National Park Service preservation philosophy, ca. 1930–1960. Today, Cades Cove retains 32 buildings and structures associated with pre-park community settlement and development and/or with NPS preservation activities.

West Prong of Little Pigeon River (Sevier County, TN). The town of Gatlinburg, on the West Prong of the Little Pigeon just north of the park boundary, was established as the settlement of White Oak Flats about 1800. Soon thereafter, settlers penetrated farther up the narrow river valley, which was christened Sugarlands for the large sugar maple trees then growing in it. Early settlers in this area included the Ogle, Huskey, Whaley, Reagan (or Regan), Ownby, and Trentham families. The terrain was precipitous and boulder strewn, making the clearing of land difficult. By the mid-nineteenth century, approximately 25 farmsteads dotted the valley and lower hillsides. The community's center was Forks of the River (a.k.a., Fighting Creek), where Fighting Creek enters the West Prong. Residents established a church, school, store, gristmill, and sawmill in this vicinity. Sugarlands was another important locus of settlement. Many descendants of the first settlers remained in the valley until the coming of the park. Other offspring left in the nineteenth century to settle Le Conte Creek and Roaring Fork, tributaries of the West Prong lying to the east of the Sugarlands. Today, the John Ownby log cabin is the only surviving structure from the Sugarlands settlement. Several log structures also have been preserved on Le Conte Creek and Roaring Fork, tributaries of the West Prong lying to the east of Gatlinburg.⁴²

Greenbrier Cove (Sevier County, TN). Greenbrier Cove, sometimes styled Big Greenbrier to distinguish it from Little Greenbrier (home of the Walker Sisters), is defined by the Middle Prong of the Little Pigeon and a number of tributaries. The Middle Prong is formed by several branches that originate on the flanks of Mounts Guyot, Chapman, and Sequoyah. This cove is not nearly as broad

⁴⁰ Dunn, *Cades Cove*, 85, 146–47, 200.

⁴¹ Dunn, *Cades Cove*, 226–27, 242–43.

⁴² Lambert, "Pioneer History," 34–36; H. C. Wilburn, C. S. Grossman, and A. Stupka, "Report on the Proposed Mountain Culture Program for Great Smoky Mountains National Park" (Gatlinburg, TN: Great Smoky Mountains National Park, 1938), 34–36.

or level as Cades Cove, and farmsteads were mainly strung out along streams as in a typical hollow settlement.

The early settlement of Greenbrier is poorly documented, but some of the first permanent residents came from nearby Tennessee communities, particularly Emerts Cove. The Whaley, Ownby, Proffitt, Bohanan, and Huskey families were prominent, with the Whaleys being especially prolific. By the late nineteenth century, Greenbrier displayed the extended kinship relationships typical of Smoky Mountain communities. The community supported two churches, Friendship Missionary Baptist Church and Greenbrier Primitive Baptist Church, as well as a general store, a shoemaker, three blacksmiths, two or three gristmills, and a least one sawmill. By the time of the establishment of the park, Greenbrier had many frame houses and only a few log houses.⁴³

Residents of the upper portions of the cove, known as “The Indian Nation,” recalled with fondness their one-room school, The Granny Cottage. Because children in the upper cove had an especially long and difficult trek to school, William “Vander Bill” Whaley offered the Sevier County school superintendent free use of one-half of a large saddlebag poplar log house if the county would supply a teacher. The superintendent agreed, and The Granny Cottage, named for Whaley’s mother, Catherine Brown Whaley, was born. Today, the only remaining Greenbrier resource is the John Messer Barn (a.k.a., Great Smoky Mountain Hiking Club Barn).⁴⁴

Cosby (Cocke County, TN). Cosby Creek rises on the slopes of Cosby Knob, in the far northeast corner of the park. The National Park Service boundary line brought only the upper portion of the creek’s watershed into the park, but as many as 90 families were displaced. Notable names in the settlement were the Williams, Williamson, Baxter, Gunter, Phillips, and Sutton families. The community supported one overshot wheel gristmill, two schools, and four churches. No large-scale logging was ever done along Cosby Creek.⁴⁵

Cataloochee (Haywood County, NC). The Cataloochee Valley, at the eastern end of the park, comprised two distinct areas of settlement: Cataloochee Creek itself (often styled Big Cataloochee) with its major tributary, Palmer Creek; and Little Cataloochee Creek, which enters the Cataloochee River from the west. Noland Mountain, elevation 3,951 feet, divides the watersheds of Little Cataloochee Creek and Cataloochee Creek. Big Cataloochee runs through a narrow cove and the surrounding area features rugged topography typical of the Great Smokies, with small parcels of tillable land present in scattered creek bottoms. The Cataloochee Trail, a Cherokee trail that extended from Jonathan Creek (now Waynesville), North Carolina, across the mountains into present-day Cosby, Tennessee, ran through a portion of the valley.

By the 1830s, herdsman were grazing cattle in the Cataloochee Valley and had erected huts for shelter, aided by the construction of the Cataloochee Turnpike around 1825 between Jonathan Creek, North Carolina, and the Cataloochee Valley. Before 1845, several individuals, including Evan (or Ivan) Hannah, James and Levi Colwell (also spelled Coldwell or Calwell), George Palmer, Young Bennett, and Jonathan Woody had permanently settled along the Big Cataloochee. Most of these families stayed in the valley and intermarried, maintaining a tradition of community until the park’s establishment. A clustered settlement formed at the confluence of Palmer Creek and Rough Branch into Cataloochee Creek. The settlement at this location was eventually named Nellie, for Nellie

⁴³ Jerry Wear, Mary Alice Teague, and Lynn Alexander, ed., *Lost Communities of Sevier County Tennessee: Greenbrier* (Sevierville, TN: Sevierville Heritage Committee, 1985), 8, 24, 35, 40.

⁴⁴ Wear et al., *Lost Communities*, 4-6.

⁴⁵ Division of Interpretation, Great Smoky Mountains National Park, “A Teachers Guide for Environmental Study Areas: Cosby District,” (Typescript, 1971, Great Smoky Mountains National Park, Gatlinburg, TN)

Palmer, a daughter of George Palmer, and came to include a store/post office, Palmer's Chapel, and a school.⁴⁶

In the 1850s, children of the original settlers crossed Noland Mountain and bought farms on Little Cataloochee Creek, clustering around a stream crossing, where a post office was later established. Over time, residents built a Baptist church, a school, and a store. Communication and trade were expanded with the completion of the Cataloochee Turnpike along additional portions of the old Cataloochee Trail in 1851 and 1860 by the states of North Carolina and Tennessee, respectively. The Cataloochee Road (a.k.a., Cataloochee Valley Road) developed as a spur of the Cataloochee Turnpike to allow circulation through the valley. Farms in the Cataloochee area, which averaged 150 acres in the 1860s, grew hay, corn, and some Burley tobacco. As elsewhere, cattle raising was an important activity. Most Cataloochee residents were pro-Confederate, and Union cavalymen burned and looted in the valley in January 1865. Both Cataloochee and Little Cataloochee grew in the 1870s and 1880s. In 1900, the Cataloochee area had about 800 residents and 150 dwellings.⁴⁷

Cataloochee remained a close-knit community linked by extended kinship ties well into the twentieth century. After 1910, apples became an important crop, especially in Little Cataloochee. W. G. B. (Will) Messer, whose parents had settled Little Cataloochee in the 1870s, was the most prosperous farmer and businessman in that settlement. His 340-acre farm was a showplace, with its 600 apple trees and a 12-room house with hot and cold running water. Messer also operated the general store at Ola, which is named for one of Messer's daughters. Access to markets improved in 1900, when the Tennessee and North Carolina Railroad reached Mt. Sterling Post Office, outside the park boundary approximately ten miles away. The construction of Walters Dam and a hydroelectric generating station on the Pigeon River near the mouth of Cataloochee Creek also affected the community, providing employment and increased contact with outsiders. The large sawmill at Mt. Sterling had a similar impact.⁴⁸

With the park's creation and as residents vacated their premises, almost all structures within Big and Little Cataloochee were burned by the NPS. Lush Caldwell, the last permanent resident, left in the late 1960s. Notable surviving buildings include the Jim Hannah Cabin, Will Messer Barn (moved to Big Cataloochee), and Little Cataloochee Baptist Church in Little Cataloochee and Big Cataloochee Methodist Church (Palmer Chapel) and the Beech Grove School (a.k.a., Cataloochee/Indian Creek School) in Big Cataloochee. See chapter six for further discussion of the early park preservation activity at Cataloochee.

Vernacular Architecture and Material Culture

The characteristic nineteenth-century farm in the Great Smokies, as elsewhere in the Upland South, was the dispersed or scattered farm. Settlers built separate, freestanding farm buildings on their cleared acreage with some regard to site topography but according to no preconceived plan. A

⁴⁶ Cornelius Maher and Michael Kelleher, "Great Smoky Mountains National Park Roads and Bridges, Cataloochee Trail and Turnpike," HAER No. TN-35-N (Washington, DC: Historic American Engineering Record, National Park Service, 1996), 6-12; Peter Shelburne Givens, "Cataloochee and the Establishment of the Great Smoky Mountains National Park" (Master's thesis, Western Carolina University, 1978), 42-49.

⁴⁷ Dianne L. Flaugh, *Cataloochee Historic District: Draft Cultural Landscape Report, Great Smoky Mountains National Park* (Atlanta, GA: National Park Service, 1999); Givens, "Cataloochee," 50-59, 89; Cornelius Maher and Michael Kelleher, "Great Smoky Mountains National Park Roads and Bridges, Cataloochee Valley Road," HAER No. TN-35-F (Washington, DC: Historic American Engineering Record, National Park Service, 1996), 6-13; Maher and Kelleher, "Great Smoky Mountains National Park Roads and Bridges, Cataloochee Trail and Turnpike," 6-12; Roy Carroll and Raymond Pulley, *Historic Structures Report, Little Cataloochee, North Carolina* (Boone, NC: Appalachian State University Department of History, 1976), 13.

⁴⁸ Flaugh, *Cataloochee Historic District: Draft Cultural Landscape Report, Great Smoky Mountains National Park*; Givens, "Cataloochee," 59-62, 68, 76-77, 93, 101, 106; Carroll and Pulley, *Historic Structures Report, Little Cataloochee*, 22; Arthur, *Western North Carolina*, 485.

reliable supply of potable water was important, and farmers often built their cabins near a spring. Around the dwelling house were usually a barn, a corncrib, a springhouse, and a smokehouse. A hog pen, chicken coop, and root cellar might also be present. Near the house would be a vegetable garden and a small orchard. Farmers usually planted a corn patch on the most level ground available. This might be near the stream bed in a lower hollow. Farther upstream in a hollow, farmers planted where they could, sometimes constructing narrow terraces with stone retaining walls. Split-rail fences enclosed the house-garden-orchard-corn patch complex to keep out free-ranging livestock.⁴⁹

Throughout the nineteenth century in the Smokies, settlers constructed cabins and outbuildings using horizontal logs with interlocking notched corners.⁵⁰ Well-established among the migrants from the Midland cultural hearth area, log construction was ideally suited to the heavily forested Appalachian South. With just an axe, a settler could raise a crude, dirt-floored round-log cabin, often called a pole shack, within a day or two. For a pole shack, round logs were roughly saddle-notched close to their ends. The saddle-shaped cut on the top, bottom, or both sides of a log accommodated the log in the adjoining wall, and log ends extended past the corner. Once a farmer settled in, he raised a more sophisticated hewn-log house with squared corners. Round-log construction remained common for smaller farm outbuildings even after the initial settlement phase, while better-constructed barns often employed hewn logs.⁵¹ Beginning in the 1890s, more prosperous farmers in the Smokies began to sheath their log houses with milled lumber, and most new houses from this period on were of milled lumber. Logs remained a common material for outbuildings up to the coming of the park. The first community buildings in most settlements, such as churches and schoolhouses, were also constructed of hewn logs.

Log Cabins and other Residential Architecture. Long before settlers entered the Great Smokies, the construction technology and form of the log cabin were established throughout the Upland South. In the first half of the seventeenth century, the settlers of New Sweden on the Delaware River brought with them a tradition of single-pen log construction and a variety of corner notching styles. The influence of New Sweden on later settlers is debatable, but the German immigrants of the eighteenth century contributed their own heritage of log building, which substantially reinforced the Fenno-Scandinavian contribution, if it was not the primary source of log construction in America. The three-room plan and central chimney typical of Pennsylvania-German log houses did not travel far, being replaced by the one-room plan and external gable-end chimney favored by English and Celtic immigrants. The external gable-end chimney was probably a contribution of migrants from the Tidewater hearth area. Representing a synthesis of the contributions of different ethnic groups, the log cabin became a defining characteristic of the nineteenth-century settlement of the Upland South.⁵²

Log cabins throughout the Upland South varied remarkably little in form; the following description of the prototypical Smokies cabin would apply with minor variations to many other locales. The Smokies cabin was a side-gabled, one-and-one-half-story, usually rectangular, single-pen structure ranging in size from 20 feet by 15 feet to 26 feet by 20 feet. Logs were hewn with axe and adze on the front and back to create a roughly plank-shaped form and secured at the corners by carefully crafted

⁴⁹ Wilhelm, "Folk Settlements," 221-22; Terry G. Jordan and Matti Kaups, *The American Backwoods Frontier: An Ethnic and Ecological Interpretation* (Baltimore, MD: Johns Hopkins University Press, 1989), 129-31.

⁵⁰ Although some historians use cabin to denote a rude pole shack and log house to describe a single-pen hewn log dwelling, cabin is used herein in its primary meaning (of Irish origin) of any one-room house. Henry Glassie, "The Appalachian Log Cabin" in *Appalachian Images in Folk and Popular Culture*, ed. by W. K. McNeil (Ann Arbor, MI: UMI Research Press, 1989), 310.

⁵¹ Glassie, "The Appalachian Log Cabin," 310; Terry G. Jordan, *American Log Buildings: An Old World Heritage* (Chapel Hill, NC: University of North Carolina Press, 1985), 18.

⁵² Fred Kniffen and Henry Glassie, "Building in Wood in the Eastern United States: A Time-Place Perspective," *The Geographical Review* 56, no. 1 (1966): 58-59; John Morgan, *The Log House in East Tennessee* (Knoxville, TN: University of Tennessee Press, 1990), 8-11; Henry Glassie, "The Appalachian Log Cabin," 310.

notches. Pine, poplar, and oak, in that order, were used most frequently in constructing cabins. Log cabins are most commonly classified by the type of corner notching employed, with the principal notching types consisting of saddle, full dovetail, half dovetail, V, diamond, and square. Half-dovetail notching predominated in Great Smokies cabins, with V-notching the second most common type. These construction techniques allowed the ends of the hewn logs to be cut off flush, producing a neat, water-tight corner. The inevitable gaps between logs were chinked with small pieces of wood or stones and daubed with mud. A front and rear door, typically in line with each other, were usually present in Smokies cabins, as were one or more windows. Isolated pier foundations of stone or log segments elevated the cabin a foot or two off the ground. Small chestnut or oak logs were split to form puncheons, which were used as floorboards. The low-pitched gable roof was framed with poles, and large hand-split shingles (called simply “boards” in the Upland South) were laid on the outside, usually over horizontal roofing boards. Before nails were widely available, the shingles were secured by pairs of poles (one inside and one outside) that were tied at their ends, forming a simple clamp. Vertical boards usually covered gable ends in the Smokies, although occasionally builders used hewn logs of decreasing length in this area.⁵³

Although round-log pole shacks often made do with a daubed stick chimney, more permanent cabins generally had stone chimneys. The stones were either dry-laid or mortared with mud. Most Great Smokies cabins featured a shed-roofed front porch, which served as an important outdoor room in warm weather. Back or side porches were not uncommon, and many cabins had shed or lean-to additions, often constructed of dimensioned lumber from sawmills after 1890. Kitchen functions commonly were moved out of the main cabin into the addition when one was built.⁵⁴

Log construction by its nature is modular, and log splices are difficult to accomplish. Consequently, major enlargements to log cabins generally took the form of a separate pen built close to the original structure. If the second pen was built on the far side of the end-wall chimney so that both pens shared the chimney, a saddlebag house resulted. When a central covered breezeway separated the two pens, the result was known as a dogtrot house. Less common was the construction of a new pen at the gable end opposite the chimney, a type known as the Cumberland house (which is also characterized by having two front doors). In other variations, a new pen might be constructed at a 90 degree angle to the original house, or parallel to its long side a few feet away. The saddlebag was the most common double-pen form in East Tennessee generally, but the great majority of Smoky Mountain log houses were single-pen structures. In addition to increasingly using milled lumber after 1890, many cabin owners also replaced board roofs with raised-seam metal roofs in later years.⁵⁵

Inside, the cabin usually featured a single room that served as kitchen, bedroom, and dining room, although occasionally the interior would be partitioned into two rooms with vertical boards. Hewn floor joists placed three to five feet below the top of the wall allowed the construction of a loft with considerable headroom. The loft was used for storage and as older children’s sleeping space and was generally reached by a narrow stair. The space beneath the stair almost always was paneled off to form a small closet. The cabin’s interior walls might be left untreated, whitewashed, or papered with newspaper. A prominent feature in the one-room cabin was the open fireplace, used for heating and cooking and equipped with a crane, pot hooks, and iron pots and frying pans. Pegs and shelves for

⁵³ Jordan, *American Log Buildings*, 16-18; Henry Glassie, “The Types of the Southern Mountain Cabin,” in *The Study of American Folklore: An Introduction*, ed. Jan Harold Brunvand (New York, NY: W. W. Norton, 1968), 345-47; Glassie, “The Appalachian Log Cabin,” 310-11; Morgan, *The Log House*, 13, 20-23, 34; John Rehder, *Tennessee Log Buildings* (Knoxville, TN: University of Tennessee Press, 2012).

⁵⁴ Glassie, “The Types of the Southern Mountain Cabin,” 348-49; Morgan, *The Log House*, 23-25.

⁵⁵ Morgan, *The Log House*, 30-33; Glassie, “The Appalachian Log Cabin,” 313-14; Fred Kniffen, “Folk Housing: Key to Diffusion,” *Annals of the Association of American Geographers* 55 (Dec. 1965):561; Rehder, *Tennessee Log Buildings*, 56-76.

storage lined the interior walls, but furnishings were few, consisting of a table, many chairs, beds, and a cupboard. Much furniture was homemade, but manufactured pieces—a clock, carpet, or even a piano—appeared in many homes.⁵⁶

The John Oliver House in Cades Cove, built early in the nineteenth century, is an excellent example of the single-pen Smokies log cabin. The cabin measures 19 feet by 17 feet and has front and rear shed porches. The wide, hewn logs have half-dovetail notches. The house has doors on three sides and a stone endwall chimney. It is founded on isolated fieldstone piers and has narrow horizontal boards in the gable ends. A number of log houses within the park began as single-pen structures and later received additions. The Peter Cable House (Cades Cove) has front and rear shed-roofed additions. The Walker Sisters' House in Little Greenbrier has a second pen built perpendicular to the original structure. At the Henry Whitehead Place (Cades Cove), the second pen lies parallel to the first, a few feet from its rear porch. The Noah Ogle House in the Junglebrook Historic District, Sevier County, Tennessee, is a good example of a saddlebag house.

The late nineteenth and early twentieth century witnessed an increased diversity of architectural styles in rural Tennessee and western North Carolina, facilitated by the penetration of popular literature, pattern books, and other media and modes of cultural transmission. As increased numbers of sawmills made dimensional lumber available within the communities of the future park, wealthier residents sometimes turned to frame construction for their homes, although log architecture persisted. One of the more prevalent residence forms was the Federal-influenced I-house, which has been identified by historians of vernacular architecture throughout the Tidewater South and the Mid-Atlantic regions. Executed in log, frame, and masonry construction, or sometimes in a combination of log and frame, these homes are one room deep, two or more rooms wide, and two stories tall. A long-lived house type, I-houses were constructed throughout the nineteenth and early twentieth centuries and could feature a variety of decorative detailing drawn from the architectural vogue of the day, such as Greek Revival, Italianate, Eastlake, or Queen Anne. Framed examples are the most common in East Tennessee, where their presence is associated with an elevated degree of economic attainment. A variant of the form in East Tennessee, seen most often in Knox County, has a one-story porch extending across the entirety or three-quarters of the facade. Within the park, the John P. and Becky Cable House in Cades Cove provides an example of the form. Other vernacular house types in rural Tennessee and western North Carolina include the T-plan, the gable-front-and-wing design, and the hipped pyramidal family. In county seats and other developed areas, high-style examples of popular late-nineteenth and early-twentieth-century architectural styles, such as the Queen Anne and Colonial Revival, were numerous. However, rural areas continued to rely on vernacular types that had only minimal applied detailing, as in the case of the I-house.⁵⁷

Barns. The most important farm outbuilding was the barn, which served multiple functions, including grain and hay storage, shelter for horses and mules, and tool storage. Several basic barn types arose in the Midland cultural hearth area in Pennsylvania; these types changed substantially as they moved south with the waves of migration. Each four-walled log unit in a barn or other outbuilding is called a crib, the term pen applying only to dwellings. The square or rectangular single-crib barn is the simplest type. This type had either a high hayloft under the roof or, occasionally, a full second story. Very often, the roof of a single-crib barn extended beyond the crib on one or both sides to provide open-walled stabling and storage space. In contrast to the side-opening English barn common to New England, the Midland barn had its opening in the gable end,

⁵⁶ Glassie, "The Types of the Southern Mountain Cabin," 353-55.

⁵⁷ Henry Glassie, *Vernacular Architecture* (Philadelphia, PA: Material Culture, 2000), 116-120, 139-140; Rehder, *Tennessee Log Buildings*, 142; Philip Thomason, *National Register Multiple Property Documentation Form: The Historic and Architectural Resources of Blount County, Tennessee* (1989); Virginia Savage McAlester, *A Field Guide to American Houses* (New York, NY: Alfred A. Knopf, 2013), 142.

secured usually by a simple hatch-type door of vertical boards (sometimes called a batten door). As this type traveled south, where most livestock ranged freely, the crib became smaller and was devoted exclusively to the storage of corn. On many small Southern Appalachian farms, a single-crib structure with sheltered side bays for a horse and a few tools (called a corn crib as often as a barn) might be the only major outbuilding needed.⁵⁸ Most of the front-gable opening, single-crib farm outbuildings in the Smokies that correspond to the basic Southern Appalachian barn (as described by Fred Kniffen) are known locally as corn cribs and are considered under other farm outbuildings.

Another early development in Pennsylvania was the double-crib barn, with the two cribs separated by a covered central passage, analogous to the dogtrot house. In Pennsylvania, the central area often sheltered a threshing floor; in the Upland South, where corn replaced small grains, this became simply a wagon runway. The runway might be left open or walled off and equipped with a door. This barn type spread throughout the Upland South and the Midwest. Several examples survive within the park, including the John P. Cable Barn in Cades Cove and the Jim Bales Barn in Roaring Fork, Sevier County, Tennessee. An elaboration of this type was the great Pennsylvania forebay barn, with a full second story that was cantilevered over the lower story on one long side. On the opposite side, the barn was often built into a hillside so that wagons had direct access to the second floor.⁵⁹

A barn type found in relatively large numbers in East Tennessee (compared to its presence in the rest of the Upland South) is the cantilever barn. The diagnostic traits of this type are: 1) the two log cribs for the foundation support and; 2) two sets of cantilevered beams that support overhanging lofts on all four sides of the building. In its most common subtype there are two cribs separated by a runway, with a second story cantilevered out on all four sides (double cantilever). Other variants have only a single cantilever (front and back) and may use one or four cribs rather than two. The cantilever barn may have evolved from the Pennsylvania forebay barn, although Moffett and Wodehouse recently suggested a similarity to frontier defensive blockhouses, which typically featured doubly cantilevered second stories. Inventories of the barn type have identified between 195 and 316 cantilever barns in East Tennessee, with Sevier County containing perhaps 76 percent of the total in the state. Other counties with these barns, listed in descending order by percentage of the total, are Blount, Johnson, Bradley, Meigs, and Morgan.⁶⁰ Henry Glassie reported a wider distribution of the type across multiple states in the 1960s, but by the 1990s Moffett and Wodehouse could identify only six such barns outside of the region: three in North Carolina, one or two in Kentucky, and one in Georgia. The reconstructed Tipton-Oliver Barn in Cades Cove is a fine example of the two crib, double-cantilever barn.⁶¹

An Upland South elaboration of the double-crib barn was the four-crib barn, which had cribs at the four corners and two runways crossing at the center. The Hiram Caldwell Barn at Big Cataloochee represents this type. When the cribs were aligned in two parallel rows of from two to four each, with a central runway, the result was a transverse crib barn.⁶² A notable example of this type is the large eight-crib barn at the Oconaluftee Pioneer Farmstead. Measuring 53 feet by 58 feet, this barn has a steep gable roof that shelters the central runway, two rows of cribs and two open-sided covered bays running along the outside of the cribs on each side.

⁵⁸ Kniffen, "Folk Housing," 561-563; Jordan, *American Log Buildings*, 30-31.

⁵⁹ Kniffen, "Folk Housing," 563; Jordan, *American Log Buildings*, 30-31.

⁶⁰ The Moffett-Wodehouse survey, published in 1993, identified 316 double cantilever barns in East Tennessee. The Rehder survey, published posthumously in 2012, identified 195 double-cantilever barns using Tennessee Historical Commission (THC) survey data. Rehder did not provide a definitive explanation for the discrepancy but speculated that his research missed many examples documented in the THC's image archive. The county distribution figures are Rehder's based on his total of 195 barns. Rehder, *Tennessee Log Buildings*, 93-95.

⁶¹ Marian Moffett and Lawrence Wodehouse, *East Tennessee Cantilever Barns* (Knoxville, TN: University of Tennessee Press, 1993), 1-8, 21-24; Rehder, *Tennessee Log Buildings*, 91-97.

⁶² Kniffen, "Folk Housing," 564-65; Jordan, *American Log Buildings*, 36.

Many log barns in the Smokies were built for durability with half-dovetail-notched hewn logs. After about 1890, many owners sided their barns with milled lumber, and many new barns were built entirely from this material. Frame barns almost always followed one of the traditional plan types, with the transverse crib type being the most popular. Among the early-twentieth-century frame barns in the park are the John Oliver Barn (a.k.a., Hugh Myers Barn) and Lawson Barn in Cades Cove and the Jarvis Palmer Barn in Big Cataloochee.

Other Farm Outbuildings. Many smaller outbuildings in the Smokies—corn cribs, smokehouses, springhouses—were single-crib log structures with front-gable openings. Often constructed with saddle-notched logs left in the round and unchinked, these buildings frequently featured roofs cantilevered several feet over the front gable end to provide shelter. Many corn cribs in the Smokies are indistinguishable from the single- and double-crib barns described above. The corn crib at the Walker Sisters' Place, with its broad gable roof sheltering the central seven-foot-by-nineteen-foot crib as well as two open-sided bays on each side, represents the more carefully built type of corn crib. The hewn logs are half-dovetailed notched, and the roof extends seven feet over the gable front. The single-crib, shed-roofed Elijah Oliver Corn Crib in Cades Cove is an example of a more modest corn crib, while the Ephraim Bales Corn Crib (Roaring Fork Historic District) is a double-crib type with a covered central runway.

Settlers constructed springhouses of log or, occasionally, stone to protect their sources of fresh water and to keep milk, butter, and other perishable foods cool. Springhouses ranged from six by eight to eight by twelve feet in plan and often had stones lining the basin where spring water bubbled to the surface. Where possible, settlers constructed troughs to allow the water to circulate freely around containers of milk. Shelves on the inside provided additional storage space for food.⁶³ Several log and frame springhouses survive in the park, including a half dovetail-notched log springhouse at the Walker Sisters' Place in Greenbrier Cove. This springhouse has a four-foot roof overhang sheltering a board-and-batten hatch type door in the front gable end and is founded on rubble stone.

Smokehouses were essential for curing pork for long-term use. Hog-butchering began in late November, when temperatures were low enough to prevent spoilage, and typically involved the entire family. After the butchering, which often occurred under the gable end of the smokehouse, hams, shoulders, and other cuts were salted and placed inside. Larger than springhouses, smokehouses were also usually single-crib, gable-end opening buildings. Opinion differed on whether a tightly chinked smokehouse or one with small gaps to allow smoke to escape produced the best results. Most smokehouses had shelves where the meat was placed to cure and a fire pit in the middle of the floor. Following the curing period, the meat would be hung from the joists for the actual smoking, which lasted two to six days.⁶⁴ A good example within the park is the Peter Cable Smokehouse in Cades Cove. This is a twelve-foot-by-twelve-foot single-crib hewn log structure, with half-dovetail-notched corners, isolated stone foundations, a front-gable overhang, and an off-center plank door.

More specialized outbuildings constructed on some farms included woodsheds, pig pens, chicken houses, blacksmith shops, apple houses, and shelters for bee gums. Most of these were single-crib structures of hewn or round logs. The Jarvis Palmer blacksmith shop and the blacksmith shop at the Oconaluftee Mountain Farm Museum present a sharp contrast in construction technique. This shop

⁶³ Allen G. Noble, *Wood, Brick and Stone*, vol. 2, *Barns and Farm Structures* (Amherst: University of Massachusetts Press, 1984), 81-82; Deice Dyer, "The Farmstead Yards at Cades Cove: Restoration and Management Alternatives for the Domestic Landscape of the Southern Appalachian Mountaineer," (Master's thesis, University of Georgia, 1988), 12.

⁶⁴ Dyer, "The Farmstead Yards at Cades Cove"; Noble, *Barns and Farm Structures*, 89-90; Eliot Wigginton, ed., *The Foxfire Book* (New York, NY: Anchor Books, 1972), 199-200.

is a crude structure of minimally squared-off logs laid up without benefit of notching or chinking. The Palmer blacksmith shop is a substantial 15' x 15' building of half-dovetail-notched logs with sawn planks in the gable ends. The chicken house at Oconaluftee is also a single-pen hewn-log structure, equipped on the inside with roosting racks and a stone trough. A rough enclosed pig pen survives at the Ephraim Bales place along Roaring Fork. This consists of a 6' x 6' single pen of irregularly notched logs topped by a low-pitched front-gable roof. The one-and-one-half-story early twentieth-century apple house at Oconaluftee (which was moved from Cataloochee) has a reconstructed foundation wall of rubblestone supporting a half-story of hewn logs.

Two objects found in the yards of most Smokies farms were bee gums and ash hoppers. Bee gums took their name from the type of wood, black gum, customarily used in their construction. A beekeeper hollowed out a portion of the trunk with a chisel, transplanted a hive to the gum, covered the top with a wood lid, and chinked up all openings but one at the bottom. To protect the gums, he might also construct an open-sided shelter like the reconstructed one at the Tipton-Oliver Place in Cades Cove. Ash hoppers were for the collection of wood ash, which produced lye for soap-making. Ash hoppers were simple wood bins with a trough at the bottom. Lined with straw or paper, the hoppers stored ashes until water was run through them to produce lye.⁶⁵

Split-rail fences surrounded the yard, corn patch, kitchen garden, and other areas needing protection from free-roaming livestock. In the simplest version, known variously as Virginia, worm, snake, or zigzag fences, settlers used hand tools to split rails from ten- to twelve-foot logs and then laid them in a zigzag fashion so that the stacked rails would stand without further support. For added stability, angled stakes were often placed at each crossing and the top rail (rider) laid in the crotch of the stakes, creating the classic stake-and-rider (a.k.a., post-and-rider) fence. Chestnut and oak were the most durable wood for fences, and sometimes the bottom rails were placed on fieldstone pads to retard water seepage and rot. Even so, the most carefully made rail fence would need replacement within a few years.⁶⁶

To provide an added degree of security to garden or yard areas, especially against foraging chickens, homesteaders often built a paling or palen fence (sometimes called a picket fence). Pales were split or sawn boards, generally from two to six inches wide, that were placed close together and came down to the ground to form a tight barrier. The simplest method of securing the pales was to bury the bottom ends in the earth, but this led to rapid rotting. Where nails were available, farmers nailed the pales to horizontal rails secured (usually by mortising) to fence posts. A third method involved using the bottom rail as a sill and placing the pales inside the middle board and outside the top board, creating a woven palen fence. Lastly, the pales might be secured to each other via woven wire. Stacked rock walls were also used and may be found within the park.⁶⁷

Yards were almost always bare dirt and were frequently swept clean. Native grasses might be present in clumps, especially along the yard edges. Front yards tended to have more formal and ceremonial functions, while backyards were functional. Foot traffic between work sites and outbuildings established well-worn paths in the backyards. Common yard trees were Eastern red cedar, black walnut, and various apple varieties. Grape vines trained on trellises or arbors were also common. In

⁶⁵ Wigginton, *The Foxfire Book*, 156-57; Dykeman and Stokely, *Highland Homeland*, 13-14.

⁶⁶ Robert Steele Withers, "The Stake and Rider Fence," in *Missouri Historical Review* (April 1950): 225-29; Noble, *Barns and Farm Structures*, 121-22; Carl Lounsbury, ed., *An Illustrated Glossary of Early Southern Architecture and Landscape* (New York, NY: Oxford University Press, 1994), 410-11. Wilma Dykeman, *At Home in the Smokies* (Washington, DC: National Park Service, 1984), 30-34.

⁶⁷ Dykeman, *At Home in the Smokies*, 30-34; E. Raymond Evans, "The Palen Fence: An Example of Appalachian Folk Culture," in *Appalachian Images in Folk and Popular Culture*, ed. W. K. McNeil (Ann Arbor, MI: Research Press, 1989), 317-21; Lounsbury, *Glossary of Early Southern Architecture*, 255-56.

their yards, families planted shrubs such as lilac and numerous flowers, among them dahlias, daffodils, peonies, tiger lilies, hollyhocks, and roses.⁶⁸

Community Buildings. The first churches, schools, gristmills, and stores in the Smokies were log buildings employing basically the same construction technology as hewn-log houses. As lumber from sawmills became more readily available in the late nineteenth century, settlers replaced these log structures with framed buildings. Surviving today within the park are two tub mills and a one-room school of log construction, as well as six churches, two large mills, and one school building of framed construction.

Mills. As previously described, corn was the basic grain of the mountains, supplying the settler's table, feeding his livestock in winter, and providing the raw material for moonshine whisky. The widespread cultivation of corn and much more limited planting of wheat required the construction of mills to grind the corn kernels into meal and the wheat berries into flour. Early settlers soon abandoned the primitive mortar and pestle and water-powered pounding mills that relied on reciprocal action and had extremely limited output. Taking advantage of the area's many fast-moving streams, farmers in the Smokies relied on their own tub mills or took their corn to one of a few custom millers with vertical waterwheel or turbine operations.

Tub mills employ the direct drive principle, with a vaned horizontal wheel located in the streambed connected to the upper (or runner) millstone by a vertical shaft. The rotation of the runner stone against the stationary bed stone grinds the grain into meal. Frequently, a wooden flume directs water onto the waterwheel. The basic technology dates to ancient Greece and remained largely unchanged into the nineteenth century. The term "tub mill" derives from the practice of surrounding the waterwheel with a circular wooden enclosure or tub to help channel the flow of water. Although the enclosures that gave the tub mill its name do not appear to have been used in the Smokies, the name was firmly linked to this type of mill when the technology arrived in the mountains around 1800. A tub mill's millstones were housed in a simple one-room structure perched on the stream bank—the front of the building rested on the bank, while the rear was raised on posts over the stream bed. Tub mills were comparatively easy to build, taking up little space and needing only meager water flow in a fast-moving stream. A farmer typically would have to hire someone to make the wheel and mill machinery but could do the rest of the construction himself. Dozens of tub mills once lined the upper reaches of streams in the Smokies. Local tradition maintains that fourteen were present on Le Conte Creek alone. A tub mill typically served one family and perhaps a few neighbors.⁶⁹

Two tub mills survive in the park. The Noah Ogle tub mill on Le Conte Creek in the Junglebrook Historic District is a simple log crib supported on braced log posts. A 50-foot wood flume directs water to the 27-inch-diameter waterwheel. The Alfred Reagan tub mill on Roaring Fork is considerably more sophisticated. Built of sawed, dimensioned lumber, the Reagan mill could operate even when the water level was low. This mill has a 32-inch waterwheel and 26-inch mill stones. It was also equipped with a small, hand-powered bolting machine. The presence of a bolting machine, used to sift flour into various grades, indicates that some wheat was grown along Roaring Fork.⁷⁰

Custom mills were small businesses, milling grain for all comers, and consequently were much larger operations than tub mills. Custom mills typically were powered by vertical waterwheels attached to the mill building, producing the sort of "old mill" image familiar to most Americans. The motion of the vertical waterwheel was transferred to a horizontal main drive shaft and then by a system of gears

⁶⁸ Dyer, "Farmstead Yards at Cades Cove," 39, 42, 142, 178.

⁶⁹ Trout, "Milling in the Smokies," 13, 33.

⁷⁰ Trout, "Milling in the Smokies," 34-35.

to a vertical shaft that turned the millstone itself. The use of gears allowed both greater efficiency and changes of speed. The power supplied by the vertical wheel also could be used to saw lumber and turn wood. Custom mills required a steady, fairly large volume of water and typically were built on the lower reaches of medium-sized streams. Millers often built dams to form mill ponds for a reliable supply of water. Mill races and wooden flumes then brought the water to the wheel. The steep terrain of the Smokies allowed the use of the overshot type waterwheel, where the water flow strikes the wheel near its top. This is more efficient than the breast or undershot types of waterwheel. Other custom mills employed brass or steel turbines, where a steady stream of water under considerable pressure passes through vanes attached to a central shaft.⁷¹

Of the two custom mills remaining in the park, one, the John P. Cable Mill, is equipped with an overshot wheel, while the other, the Mingus Mill, has a turbine. The Cable Mill, at the western end of Cades Cove, is typical of small custom mills in the Smokies. As many as seven similar mills once operated in Cades Cove. Built in the 1870s and restored by the National Park Service in 1935–1936, the Cable Mill is a one-room frame structure with a basement. Water reaches the eleven-foot diameter waterwheel from Mill Creek by means of a millrace and an open-topped wooden flume. A low dam across the creek impounds water for the mill, and a channel cut by John Cable from nearby Forge Creek to the millpond helps ensure a sufficient flow of water. The waterwheel is connected by a wooden shaft to a wood and metal gear system in the basement, which transfers power to a vertical shaft connected to the millstones on the main floor. About half of the 18' x 22' main-floor room is occupied by the millstones, a meal bin, and other milling equipment, while the other half is an open area for customers waiting for their meal. The Cable Mill waterwheel also once powered a separate wheat mill in a building a few feet distant from the extant mill, and a second waterwheel powered a sash sawmill. No trace of either operation remains.⁷²

One of the most impressive and heavily visited structures in the park is the two-and-one-half story Mingus Mill, located on Mingus Creek in the Oconaluftee section of the park. Powered by a turbine concealed beneath the building, the Mingus Mill had separate mills for corn and wheat. Constructed in 1886 by Virginia millwright S. T. Early, the extant Mingus Mill was at least the second mill built on the site. Mingus Creek was dammed to provide a water supply, which then traveled through a millrace and a 200-foot flume to a 22-foot-high penstock. The penstock built up the water pressure needed to power the turbine, which developed 400 rpm and eleven horsepower. The vertical shaft from the turbine was connected to an elaborate system of shafts, pulleys, and belts. The turbine powered not just the two sets of millstones for corn and wheat but also a wheat cleaner and a conveyer apparatus that moved wheat between floors of the building. Customers brought grain to the main floor of the building, which contained the millstones, bins, and other equipment. Corn was ground into meal and returned to the customer's sack. Wheat moved by conveyer to the second floor for cleaning, returned to the main floor for grinding, went back to the second floor for bolting into various grades of flour, and finally descended to the first floor through chutes to the waiting customer.⁷³

In form, the Mingus Mill is a simple, utilitarian structure with a heavy timber frame of yellow poplar and exterior cladding of weatherboards with beaded trim. The front half of the building rests on dry-laid fieldstone piers, while the rear is supported on braced timber posts because the ground level falls away. The front-gable roof is covered with hand-split oak shingles. Hatch-type batten doors are present on the first and second floors. The second-floor door allowed grain to be loaded into

⁷¹ Trout, "Milling in the Smokies," 15-17, 36.

⁷² Edward L. Trout, "Draft Historic Structure Report, John Cable Mill" (typescript, n.d., Great Smoky Mountains National Park, Gatlinburg, TN), 3-8.

⁷³ Edward L. Trout, "Draft Historic Structure Report, Mingus Mill" (typescript, 1990, Great Smoky Mountains National Park, Gatlinburg, TN), 2-7.

wagons by means of conveyor planks. The miller used the building's top floor to store wheat. The mill dam (a small diversion weir) is not currently visible within Mingus Creek—it is unknown whether it survives beneath the stone and gravel of the creek bed. The millrace has been rehabilitated along its original course, and then empties into an elevated wood flume that carries the water to the mill. The flume has been rebuilt and repaired on several occasions.

Churches and Schools. The first community building in a typical mountain hollow settlement was the church, made of hewn logs in much the same fashion as a log cabin. These buildings often served as school rooms as well, until the population was large enough to justify the construction of a separate schoolhouse. In the Smokies, the Baptist and Methodist denominations predominated. Given the small congregations and the emphasis these denominations placed on preaching and singing rather than liturgical ritual, the needs of the faithful were met by simple one-room buildings. A raised platform at one end for the preacher's lectern and rows of benches for the congregants were all the interior furnishings needed. The main exterior embellishment was a belfry or steeple. The ringing of the church bell summoned the neighborhood to services and also tolled upon the death of a neighbor.

Until free public schools reached the mountains in the late nineteenth century, Smokies residents relied on subscription schools. Community members “made up” a school by contributing to a common fund to hire a teacher and by supplying a building. The school term lasted about three months, and all ages were taught together in the single room. A desk and chair for the teacher, benches for the pupils, and pegs and a blackboard attached to the walls were the furnishings. Instruction was limited to the basics of reading, writing, and arithmetic.⁷⁴

Representative of the one-room hewn log schools of the Smokies' early days is the 1882 Little Greenbrier School. A large (24' x 29') single-pen structure, the building declares its institutional function by the placement of the main entrance in the gable end rather than on a long side, as in a cabin. According to tradition, Sevier County declined to build a school for the community, but agreed to supply a teacher if the residents constructed their own. Work on the schoolhouse began in January 1882 with the felling of huge poplar trees on the property of Ephraim Ogle. The logs were large enough for two matching planks to be hewn from each. Placed in opposite walls of the school, the matched planks allowed the walls to be built up evenly. The structure served as a school and a Primitive Baptist Church from its construction until the mid-1920s. The last school session was held in 1935–1936. With its carefully dovetail-notched, 24”-wide rough-hewn planks, the school stands today as a reminder of both the craftsmanship of the mountain residents and their commitment to providing a basic education to their children.⁷⁵

The 1907 Beech Grove (Indian Creek) School in the Cataloochee area of the park is a weather-boarded balloon-frame structure built for the community by the Board of Education of Haywood County, North Carolina. It represents rural elementary schools from the early part of the twentieth century. After repeated futile pleas to the Board of Education to replace an overcrowded, inadequate boxed lumber schoolhouse, Cataloochee residents apparently took matters into their own hands. An “accidental” fire consumed the old structure in 1906 but mysteriously failed to damage any of its furnishings. The following year, the school board began construction of a two-room, 24' x 48', one-story school. Local residents donated trees to be sawed into lumber for the building, and Board of Education records indicate prices paid for doors and windows, shingles, and twenty double desks. Once the school was finished, grades one through three were taught in one room, and grades four through seven in the other. A movable partition between the two rooms could be raised for large

⁷⁴ Dykeman and Stokely, *Highland Homeland*, 99.

⁷⁵ Edward L. Trout, “Draft Historic Structure Report, Little Greenbrier School” (typescript, n.d., Great Smoky Mountain National Park, Gatlinburg, TN), 9-13.

gatherings. After the establishment of the park, class sizes dwindled, but instruction continued into the early 1950s.⁷⁶

Six substantial frame church buildings survive in the park as reminders of the central role that the small Baptist and Methodist churches played in the lives of mountain residents. As stated above, community social life revolved around church services, Sunday school, annual week-long revival meetings, grave decoration, church suppers, weddings, and funerals. Many mountain communities could not support a full-time minister and relied on circuit-riding preachers who visited one weekend a month. When the coming of the national park forced area residents to leave, they prevailed upon the Park Service to allow continued use of the churches by the congregations. Maintenance was at first largely the responsibility of the congregations but has now been assumed by the Park Service. The most potent symbols of the park's lost communities, the churches now figure prominently in the annual reunions held in many of the former communities.

All six of the churches are relatively plain, gable-end opening, rectangular-plan, framed structures. These are essentially rectangular boxes providing an open auditorium for worship and other community activities. Weather boarded, painted white, and pierced by evenly spaced windows on each sidewall, they bespeak the simple beauty of the country church in the woods. Although basically similar, the churches exhibit subtle variations of detail. Four of the churches have belfries perched on their ridgelines, and two have bell towers articulated as distinct masses at their entrances. The interiors of the churches are much alike: all have single open rooms with a raised platform at one end for the minister and open floor space for movable benches or pews. Cemeteries are associated with all six of the churches.

The Cades Cove Primitive Baptist Church is probably the plainest of the park's churches. A simple front-gabled rectangular box, the building has only an open-sided, pyramidal-roofed belfry to soften its austere exterior. Cades Cove residents established this church in the 1820s, making it one of the oldest documented congregations within the park's boundaries. Meeting at first in private homes and later in a hewn-log building, the Primitive Baptists constructed the present building in the early 1880s. A single door, centered on the blank facade, provides access, and the other three sides are pierced by small 6/6 light windows. The congregation maintained the building under a special-use permit until 1971, when the National Park Service assumed maintenance responsibility.⁷⁷ The nearby Cades Cove Methodist Church (1902) is quite similar in design but boasts a bit more decoration, with its pedimented window hoods and paired doors with three-light transoms. Cades Cove's third church, the Missionary Baptist Church, is distinguished by an enclosed entry porch and an apsidal choir room projection at the back.

Smokemont Baptist Church and Cataloochee Methodist Church (Palmer Chapel) in North Carolina both have bell towers projecting from their facades and serving as entries. The Smokemont congregation, originally the Oconaluftee Baptist Church, was organized in 1836. The extant Smokemont church building, constructed in 1912, culminates in a louvered belfry with a pyramidal roof. Most elaborately adorned of the six park churches is Little Cataloochee Baptist, which stands on a dramatic hilltop site overlooking the Coggins Branch of Little Cataloochee Creek. Scalloped bargeboards, jigsawn eave boards, and a cross-gabled belfry sheathed with "fishscale" shingles add to the charm of this country church.

⁷⁶ Edward L. Trout, "Draft Cataloochee Historic Structure Reports: Palmer Chapel, Beech Grove School, Little Cataloochee Baptist Church" (typescript, n.d., Great Smoky Mountains National Park, Gatlinburg, TN), 6-8.

⁷⁷ Edward L. Trout, "Draft Historic Structure Report, Cades Cove Historic District (Churches)" (typescript, 1991, Great Smoky Mountains National Park, Gatlinburg, TN), 2-3.

Roads and Bridges. The earliest settlers of the Smokies built primitive wagon and sled roads, many of which followed existing Native American trails or ran through valleys and along ridges. County roads were established along these and additional routes in the mid nineteenth century as interior areas were more densely settled and needed reliable connections for trade and communication with the historical market communities outside the park. Many of these primitive roads later were reworked and paved and today serve motorists visiting the park. A prime example is the Newfound Gap Road (U.S. 441), which in large part follows the route of the Indian Gap Trail. Other settlement-period roads became truck or horse trails. Much of the work of the Civilian Conservation Corps in the park involved stabilizing and improving old settlement roads (see chapter five). Surveying and evaluating the remnants of the dozens of settlement-period roads in the park were beyond the scope of this Historic Resource Study. As discussed in Chapter 1, only major roads were evaluated.

Roads were always of critical importance to the residents of Cades Cove, a fertile agricultural area isolated by surrounding mountains from easy access to markets. Before the Civil War, settlers built the Parsons Branch Road, leading from the southwest corner of the cove to the Little Tennessee River. Largely following ridgelines as it exits the cove and later running through the valley of Parsons Branch, the Parsons Branch Road generally follows its pre-1861 alignment and is unpaved. About 1920, Blount County built winding Rich Mountain Road to connect Cades Cove with Tuckaleechee Cove. Considered a modern motor road when built, Rich Mountain Road replaced earlier roads through Rich Mountain Gap, the primary means of access for early settlers of Cades Cove. Rich Mountain Road was the most heavily traveled road into the cove from the early 1920s to the early 1950s, when the Laurel Creek Road was finished. Today it is a 12-mile, hard-packed gravel, one-way road out of Cades Cove, closed in winter. As discussed above, roadways into the Cataloochee Valley in North Carolina followed a similar progression from Native American trail, to county road, to NPS motor route. The Cataloochee Turnpike was of critical importance for the growth of the community and was subsequently improved by the CCC.⁷⁸

As more and better roads began to be constructed in the Great Smokies in the twentieth century, the need increased for durable, well-constructed bridges over streams. Early roads in the mountains typically relied on fords to get across creeks, and the humid conditions of the mountain environment necessitated the frequent replacement of wooden bridge members. In America, the development of bridges made of more permanent materials—iron, steel, and concrete—was closely tied to the spread of railroads in the nineteenth century and of motor roads in the twentieth.

The rapid growth of an American rail network beginning in the 1840s brought with it the need for bridges of unprecedented strength, permanence, and fire-resistance. Iron (later, steel) was the logical material for railroad bridges, and the truss form emerged as the most efficient. A truss is an arrangement of relatively short individual members formed and connected into a rigid unit. The diagonal bracing members of a truss create a system of triangles, which is the key to the strength and rigidity of a truss. If a roadway is laid on the top horizontal member (chord) of two parallel trusses, a deck truss bridge is the result. Placement of the roadway on the bottom chord creates a through truss bridge. Timber truss bridges were built in America from the late eighteenth century and often included a supporting arch for added security. In the 1840s, iron began to replace wood in truss bridge construction, and the decade also witnessed the patenting of the two types of truss bridge that would eventually come to dominate. The American father and son team of Caleb and Thomas Pratt patented the Pratt truss in 1844. The Pratt design included crossed diagonal members in each panel of the truss. The Warren truss was invented in England by James Warren and Willoughby Monzani and patented in 1849. Originally designed with diagonals and chords but no vertical members, the

⁷⁸ Bureau of Public Roads, "Report on Great Smoky Mountains National Park Roads" (typescript, 1951, Great Smoky Mountains National Park, Gatlinburg, TN); A. Randolph Shields, *The Cades Cove Story* (Gatlinburg, TN: Great Smoky Mountains Natural History Association, 1977), 13.

Warren truss's most efficient form eventually proved to include posts and a single diagonal per panel.⁷⁹

Although steel Pratt and Warren trusses were used for many early highway bridges, concrete emerged in the twentieth century as the material of choice for this application. By 1880, monolithic (unreinforced) concrete was in widespread use in the United States for simple structural elements under compression. Developments in reinforcing concrete with iron or steel bars allowed the material's use where tensile and shearing stresses were present. Reinforced concrete bridges are of two main types: concrete arch bridges and concrete girder bridges. Engineer Ernest L. Ransome designed the first reinforced concrete bridge in America, the 1889 Alvord Lake Bridge in San Francisco's Golden Gate Park. Another innovator in concrete arch bridge technology was engineer Daniel B. Luten, who left his career as a professor of engineering in 1900 to found a firm that specialized in concrete arch bridges. Between 1900 and 1911, Luten supervised the design and construction of more than 4,000 concrete arch bridges. After World War II, the mass-producible concrete girder bridge came to dominate highway construction, and the more labor-intensive concrete arch bridge was rarely used.⁸⁰

The Pratt and Warren truss bridges over Cataloochee Creek and the two Luten concrete arch bridges spanning tributaries of the Oconaluftee, all built around 1920, represent the advent of better automobile roads in the Smokies in the 1920s. These durable, all-weather bridges greatly improved communications between the mountain communities and nearby places. Each is a comparatively rare example of its type in western North Carolina.

Known Resource Types

This chapter provides contexts for four resource types: 1) resources built in the course of settlement and community development in the Great Smoky Mountains; 2) resources that embody the architecture of the Upland South; 3) mills; and 4) bridges and roads. Property type descriptions, significance, and registration requirements follow below.

Settlement and Community Development Resources in the Great Smoky Mountains.

Residences, agricultural buildings, community buildings, mills, bridges, and roads were constructed individually or in groupings to support European-American habitation, agricultural activities, and social and religious functions prior to the establishment of Great Smoky Mountains National Park. Sited in coves, valleys, or gaps, the geographic location and spatial organization of the resources demonstrates the historical sequence and arrangement of the founding and expansion of farmsteads and kinship-linked dispersed hamlets within the five counties making up the park. The locations of the properties also illustrate the relationship between human occupancy and regional geography and natural resources. Through their design, the resource types included in this context clearly evidence their intended purpose and, thus, are associated with the traditional and/or evolving economic organization and lifeways of residents and/or their community. Major roads demonstrate patterns of exploration and settlement, as well the linkages of communication and trade that these communities maintained (and any attendant difficulties in this regard). Evaluated individually, agricultural buildings and mills, churches, and schools may express the importance of and means of agricultural production, religious worship, or education, respectively, within southern Appalachian communities.

⁷⁹ Carl Condit, *American Building: Materials and Techniques from the First Colonial Settlements to the Present* (Chicago, IL: University of Chicago Press, 1968), 52-53, 93-100.

⁸⁰ Condit, *American Building*, 158, 173-74, 251; "Reinforced Concrete Bridges of the Luten Design" (Indianapolis, IN: Hollenbeck Press, n.d.), 5.

Settlement and community development resources are significant under Criterion A at the local level because they are associated with the broad patterns of community development in Tennessee's Cades Cove, Cosby, Greenbrier, the West Prong of the Little Pigeon River; North Carolina's Cataloochee, Deep Creek, Hazel Creek, and Oconaluftee Valley; or a smaller settlement cluster.

To qualify for National Register listing under this context, resources must be associated with the settlement or occupancy of their respective community (prior to NPS acquisitions in 1928 or 1944) and should convey their historical function as a residence, agricultural building, community center, school, mill, bridge, or road. Resources should retain their design, location, feeling, and association in order to convey these functions and associations. Resources that have been altered within the period of significance will be eligible for listing if they still convey their historical function. For roadways, integrity of location, setting, feeling, and association are all particularly important in demonstrating the importance of a given route to the historical development of a community. Roadways that were improved by the NPS with new surfaces, drainage features (i.e. culverts) and increased widths on curves may still be eligible so long as the original route alignment (or the majority thereof) is maintained.⁸¹ Religious properties that are to be nominated to the National Register individually would be subject to Criteria Consideration A: Religious Properties. Individual religious properties must be significant for their role in the lives of mountain residents and community development, not for a particular religious affiliation. Religious properties are exempt from this Criteria Consideration if they contribute to a district primarily composed of non-religious properties. Resources that have been moved after the period of significance would not be eligible for listing under this criterion as this destroys associations with historic events and may create a false sense of historical development. However, moved properties may still qualify for listing under Criterion C in the area of architecture by applying Criteria Consideration B: Moved Properties (see discussion below). Reconstructed properties must meet the requirements of Criteria Consideration E: Reconstructed Properties, specifically that the reconstruction should be accurately executed in a suitable environment, be presented in a dignified manner as part of a restoration master plan, and there are no other surviving buildings or structures with the same associations.

Resources that Embody the Architecture of the Upland South. Churches, schools, residences, mills, and agricultural resources fall within this property type if they incorporate the principles of log construction or demonstrate the typical physical attributes (location, design, form, materials, construction, and workmanship) of functional types (e.g., one-room schoolhouse, cantilever barn) common in the Upland South. Individual resources may also exemplify certain architectural styles as interpreted within the geographic region. Groupings of such resources may form a district that incorporates the typical spatial arrangements and/or functional resource types of an Upland South community or farmstead. Barns demonstrating the characteristics of typical vernacular forms—single-crib, double-crib, cantilever, or four-crib—would also fall within this property type.

Resources of this property type are significant under Criterion C in the area of architecture at the local level. Log buildings and structures and the various barn types represent an important regional vernacular construction technique synthesized from the architectural heritage of Mid-Atlantic immigrant groups and transmitted into the Upland South by English and Celtic immigrants. The technique was uniquely suited to the rich timber resources of the Appalachian chain and was applied to all of the property subtypes identified under this theme. Schools and churches demonstrate the particular forms and stylistic attributes of such resources in the Upland South.

⁸¹ Most roads currently maintained for motor vehicle traffic by the NPS have been resurfaced from their original packed dirt and/or gravel to packed gravel (or in some cases asphalt), and sharp curves widened. However, these changes in materials and workmanship do not disqualify a roadway from National Register eligibility, particularly as contributing resources within a historic district, if the other aspects of integrity as referenced above are retained.

To qualify for National Register listing under this context, resources must incorporate log construction as one of their primary techniques and/or exhibit the typical attributes of the particular vernacular or functional forms discussed above. They should retain the design, materials, and workmanship that are necessary to express architectural significance. Buildings that have been reconstructed or otherwise altered prior to NPS acquisitions in 1928 or 1944 will be eligible for listing if they still convey their historical function. Resources that have been moved from their original location after the period of significance may be eligible under Criteria Consideration B: Moved Properties, if they are significant for their architectural value and if they retain sufficient integrity as described above to demonstrate this significance.

Mills. Saw- and gristmills are specialized buildings incorporating water-powered machinery for the processing of raw natural materials. Resources of this type will be located adjacent to streams or rivers. Their functional systems extend outside the building footprint to incorporate water control and power generation systems such as dams, gates, penstocks (a.k.a., flumes), and turbines or waterwheels. Internally, the buildings house machinery for materials handling and processing. The buildings will exhibit those characteristics necessary for their function: multi-level construction with exposed basement levels or open pier supports for housing or access to power generation machinery near water level; open interior plans to house machinery and related activities; robust framing or bracing for heavy machinery; and large door openings for movement of raw and finished materials in and out of the building. They may also incorporate typical vernacular construction characteristics (see above).

Mills are significant under Criterion C at the local level in the area of architecture and/or engineering. The design and construction of such facilities incorporates specialized skills, knowledge, and equipment for the collection and distribution of water, generation and transmission of mechanical power, and milling of the raw material. Knowledge of milling practices was transmitted via word-of-mouth (e.g., apprenticeships) and via early technical publications. Now relatively scarce, intact water-powered mills provide important examples of water-powered technology and its regional application. Mills lacking their machinery are significant under this Criterion in the area of architecture if they incorporate or exemplify the particular attributes of mill building design, as identified above.

To qualify for National Register listing under this context, resources must have been designed or substantially adapted for a milling activity and convey this function through the design characteristics discussed above. They should have been constructed prior to NPS occupancy of the site (either before 1933 or 1944). Mills must retain integrity of design, materials, workmanship, and location. They should retain substantial amounts of their power generation, transmission, or milling machinery and equipment unless they are to be nominated for their architectural significance. Buildings that have been moved after the period of construction would not be eligible for listing unless they meet the requirements of Criteria Consideration B: Moved Properties. Relocated mills must still be able to convey their engineering values: they should have an appropriate position on a watercourse and incorporate original technical features (not reconstructions).

Bridges and Roads. Bridges of the Pratt and Warren truss or Luten reinforced concrete arch types are included in this property type. Bridges of these types are significant under Criterion C in the area of engineering. These bridges represent significant developments in bridge construction c. 1880-1920 that improved on early wood beam and truss designs in their durability and load capacity. The Luten bridges also represent an important transitional era in the refinement of the reinforced concrete bridge.

Bridges must have been constructed prior to NPS occupancy. They should retain integrity of design, materials, and workmanship such that the original and important aspects of their truss or concrete arch type are discernible. Bridges moved to span another waterway that retain these aspects of integrity may still be eligible.

To be significant under Criterion C as a work of nineteenth- or early twentieth-century engineering, roads would need to have been constructed prior to NPS occupancy and retain integrity of location, design, materials, workmanship, and feeling such that their period of construction is conveyed. Because this HRS evaluates only those roads actively maintained by the NPS, all of these aspects of integrity are rarely retained. Bridges have been replaced for safety reasons, roadways have been resurfaced, and drainage features replaced.

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CHAPTER THREE: EXTRACTIVE INDUSTRIES IN THE GREAT SMOKY MOUNTAINS, 1820–1944

This context evaluates resources built for logging, mining, and related industrial processes that occurred in the nineteenth and early twentieth centuries, primarily before the establishment of Great Smoky Mountains NP. Within this context, extractive industries are those activities related to the removal of raw materials from their natural environment so that they may be processed into bulk commodities or utilized through industry for the manufacture of goods. Excluded from this context are those activities and related resources that were primarily subsistence-based and therefore associated with patterns of settlement and community development in the park or region (see chapter two).

REGIONAL DEVELOPMENT OF EXTRACTIVE INDUSTRIES IN EASTERN TENNESSEE AND WESTERN NORTH CAROLINA

Extractive industries in the communities that would make up the park operated within county, regional, or sometimes national markets by direct participation in commodities sales or indirectly through relationships with other industrial concerns. For this reason, the development of extractive industries within Great Smoky Mountains NP is best understood within patterns of regional industrial development in western North Carolina and East Tennessee.

Broadly speaking, industrial development of the counties making up the park may be divided into two eras separated by the Civil War: ca. 1820 to 1861 and 1880 to 1944. Soon after white settlers arrived in the Smokies in the late eighteenth century, there were a minority of residents who had far-sighted visions that the region's timber and mineral wealth might be exploited and developed at a regional level. Although the predominant and instinctive economic endeavors of the regions revolved around agricultural pursuits, by about 1850 a substantial amount of small-scale industry and would-be industrialists were looking for new opportunities. In East Tennessee, these included mining, iron manufactures, and logging. African American slaves were commonly used in these endeavors. With the development of the iron industries in Pittsburgh and Birmingham, there was a logical assumption that coal and iron resources in Tennessee could contribute to a similar iron-producing boom there. In the 1840s, the discovery of the Ducktown, Tennessee, copper ore deposits (discussed below) had also generated interest in other minerals. Knoxville and Chattanooga became the centers of speculative capitalists, whose agents fanned out into the mountains. The construction of the East Tennessee, Virginia, and Georgia Railroad (ETV&G) connected Bristol and Chattanooga, Tennessee, via Knoxville in 1858. Even before its completion, the railroad heightened the prospects for industrial advancement and seems to have contributed to increased interest in mineral and timber assets in the study region.⁸²

Generally, inadequate local capital, limited markets, and impingements on year-round heavy freight transportation in the form of the Appalachian Mountains and the inadequacies of the Tennessee River placed limits on the industrial growth of the region. Just when the coming of the railroad seemed to offer hope of advancement, prospects were cut short by the Civil War (1861–1865). This conflict was a significant setback for industrial activity in the region, especially East Tennessee. Because of its strategic importance, the Cumberland Gap region became one of the more contested

⁸² Banker, *Appalachians All*, 56, 63, 67-70; Eller, *Miners, Millhands and Mountaineers*, 52-53; Susan L. Yarnell, *The Southern Appalachians: A History of the Landscape* (Asheville, NC: US Forest Service, Southern Research Station, 1998), 16.

during the war as both Confederate and Union soldiers occupied the region at different times. Each side's successive efforts to destroy the transportation and manufacturing infrastructure of the region further laid waste to its industrial resources.⁸³

A prolonged pause in industrial development followed the Civil War. Beginning ca. 1880, there was a period of dramatic industrial expansion that continued almost unabated until ca. 1920. Within southern politics and business emerged the concept of the "New South," a catch-all phrase used by community leaders to describe the vision of a modern, industrialized economy. This vision depended in large part on exploiting the South's natural resources. Its advocates sought to attract capital, skills, and manpower from outside the region to fulfill this goal. New South politics meshed with corporate interests that had already started exploiting northern Appalachia, and there was a dramatic influx of "mineral men" or "mineral hunters" who were scouting for prospects on their own behalf or on behalf of investors outside the region. In the Great Smoky Mountains, the resources of primary interest were timber and copper.

Railroads played a substantial role in facilitating industrial development by linking natural resources to regional production centers and then to the long-sought national markets. The ETV&G emerged as an important carrier in Post-bellum Tennessee. In North Carolina, the Western North Carolina Railroad reached Asheville in 1880 and soon completed two branches that skirted the Smokies. The first branch, completed in 1882, ran through Madison County to the Tennessee state line, where it connected with another route to Knoxville. A second branch ran to Waynesville, North Carolina, in 1884 and was extended to the Georgia state line by way of Sylva and Bryson City, North Carolina, by 1900.⁸⁴ These routes would all later be consolidated into the Southern Railroad. Narrow- and standard-gauge short lines quickly branched off from these main line routes to more remote coves or valleys in the push to access to mineral and timber resources. These short lines were often constructed by the mining or lumber companies.⁸⁵

The industrial development of this period was accompanied by a population shift toward urban centers. These included established cities such as Knoxville, but also company towns such as the lumber cities of Sunburst and Ravensford, North Carolina. The declining competitive status of mountain farms contributed to this trend. In a parallel development, a relatively small number of entities from outside the region gained control of Great Smoky Mountains real estate and mineral rights. For example, by 1910, just 13 corporations controlled more than 75 percent of the lands in what would become the North Carolina portion of the park.⁸⁶

LOGGING IN THE GREAT SMOKY MOUNTAINS, CA. 1880–CA.

Mountain residents had always relied on the forests that surrounded them for the raw material for buildings, fences, furniture, utensils, and farm implements. After the Civil War, scattered sawmills started operating to satisfy the local demand for finished lumber. Beginning about 1880, however, large national lumber and pulp companies became interested in large-scale exploitation of the timber resources of the southern Appalachians, partly because of the decline of the previously dominant Great Lakes lumber industry. By the time that the Great Smoky Mountains NP was formed, an estimated 40 percent of the parklands had been corporately logged, with 51 percent of the North Carolina side of the park logged in comparison to 27 percent in Tennessee.⁸⁷

⁸³ Banker, *Appalachians All*, 56, 63, 67-70; Yarnell, *The Southern Appalachians*, 16.

⁸⁴ Eller, *Miners, Millhands and Mountaineers*, 99-100; Robert S. Lambert, "Logging in the Great Smoky Mountains National Park: A Report to the Superintendent" (typescript, 1958, Great Smoky Mountains National Park, Gatlinburg, TN), 10.

⁸⁵ Eller, *Miners, Millhands and Mountaineers*, 48-57, 65-66; Yarnell, *The Southern Appalachians*, 17-18.

⁸⁶ Eller, *Miners, Millhands and Mountaineers*, xix-xxi.

⁸⁷ Charlotte Pyle, "The Type and Extent of Anthropogenic Vegetation Disturbance in the Great Smoky Mountains before National Park Service Acquisition" *Castanea* 53(September 1988):187.

Commercial exploitation of the forests within the future park is broadly divided into two phases of activity. In the first phase, from 1880 to about 1900, local and regional lumber companies purchased individual trees of exceptional quality as cabinet wood or prime construction timber for delivery by the owners. The most profitable tree species was poplar, while some ash and cherry also was removed. A minimal amount of tanbark for leather processing was taken from chestnut, oak, and hemlock trees. Local capital and initiative dominated this phase of logging. Timber sales were often a source of supplementary income for many farmers who harvested timber in more accessible areas of the forest.

This early phase of logging was intensive in its use of manual and animal labor, as well as streams. After cutting trees to log length, loggers would use horse or oxen to drag (“snake”) the logs through the standing timber to the nearest stream. There, logs would be accumulated in anticipation of heavy rainfalls that would allow logs to be run downstream to the nearest river. Alternately, loggers would construct splash dams (temporary plank and log structures) to impound the stream. These would be released to send the logs to the river. This practice was inefficient, as saleable lumber would often be left stranded on the creek banks. On reaching the river, logs could be assembled into rafts to be floated to their ultimate destination. In other instances, a portable mill might be brought into the woods, and logs cut there. Loggers would take the resulting boards to the nearest railhead by wagon.⁸⁸

In the second phase of commercial logging from 1900 into the 1930s, the speed, scale, and technology of logging changed as companies brought their increasingly mechanized operations into the heart of the mountains.⁸⁹ Steam-powered ground skidders, incline skidders, or overhead cableway skidders could remove logs from previously inaccessible terrain and reach up to the highest peaks of the Smokies.⁹⁰ In some instances, log slides were constructed over long distances.⁹¹ Railroad trains powered with geared Heisler and Shay locomotives carried the skidders into the mountains and extracted the logs en masse to mills. The railroads paralleled streams into formerly remote areas of the Smokies. As logs were cut out of a particular watershed, the tracks would be removed for use elsewhere, leaving the railroad roadbed behind. The companies established their mills in strategic locations, usually on rail lines and in larger valleys or coves in and around the Smokies. At the mills, the circular saws prevalent during the first historical phase of logging were replaced with giant band saws that could accommodate larger logs and process them faster and with less waste.⁹² Mechanization permitted processing of large quantities of timber and the economic calculus of their operation demanded high production figures to justify and recoup the capital investment.⁹³

The logging companies established semi-permanent villages and temporary camps for employees and their families. Villages such as Smokemont and Ravensford, North Carolina, and Elkmont, Tennessee, were by their nature short-lived, since their existence depended on stands of

⁸⁸ Lambert, “Logging in the Great Smoky Mountains,” 14-15.

⁸⁹ Eller, *Miners, Millhands and Mountaineers*, 86-90; Robert S. Lambert, “Logging in the Great Smoky Mountains,” 9-10; Frome, *Strangers in High Places*, 166.

⁹⁰ A ground skidder was a steam-powered cable hoist mounted on a railcar. An incline skidder (colloquially referred to as a “Sarah Parker”) was the same device, but mounted directly on tracks running directly up the mountain side. The skidder would hoist itself up and down the slope. The overhead cableway skidder, as its name implies, mounted steel cable and hoists on booms and could move logs aerially up to 5,000 feet. Lambert, “Logging in the Great Smoky Mountains,” 13-19.

⁹¹ Plank troughs built down a mountainside.

⁹² As of 1908-1909, there were only seven large band mills in western North Carolina, but these accounted for 16 percent of the lumber processed in the period. The remainder was processed by about 300 portable mills and a small number (100-150) of water-powered saw mills. J.S. Holmes, “Forest Conditions in Western North Carolina,” *The North Carolina Geological and Economic Survey, Bulletin No. 23*, (Raleigh, NC: Edwards and Broughton Printing Co., State Printers, 1911), 60-63.

⁹³ Davis, *Where There Are Mountains*, 163-169; Holmes, “Forest Conditions in Western North Carolina,” 60; Lambert, “Logging in the Great Smoky Mountains,” 12-19; Eller, *Miners, Millhands and Mountaineers*, 110.

merchantable timber. Typical communities might house 300 to 1,000 people in bunkhouses and cabins and offered minimal social facilities such as a store, church, and post office (figures 3.1, 3.2, and 3.3). Residences were designed with cost and rapid construction in mind and were usually simple board-and-batten wood buildings without plumbing. Small, remote camps provided only bunkhouses and a dining hall for male residents. Most transitory were the temporary logging camps known as “stringtowns,” so named because they were strung alongside the company railroad (figure 3.4). These camps used portable wood buildings (sometimes called “set-off” houses) that could be loaded on railroad flatcars and moved as cutting proceeded from area to area. Although thousands lived and worked at mill villages and lumber camps, few structures remain from the extensive forest-related industry once carried out in the park. These are addressed in the individual community narratives below.⁹⁴

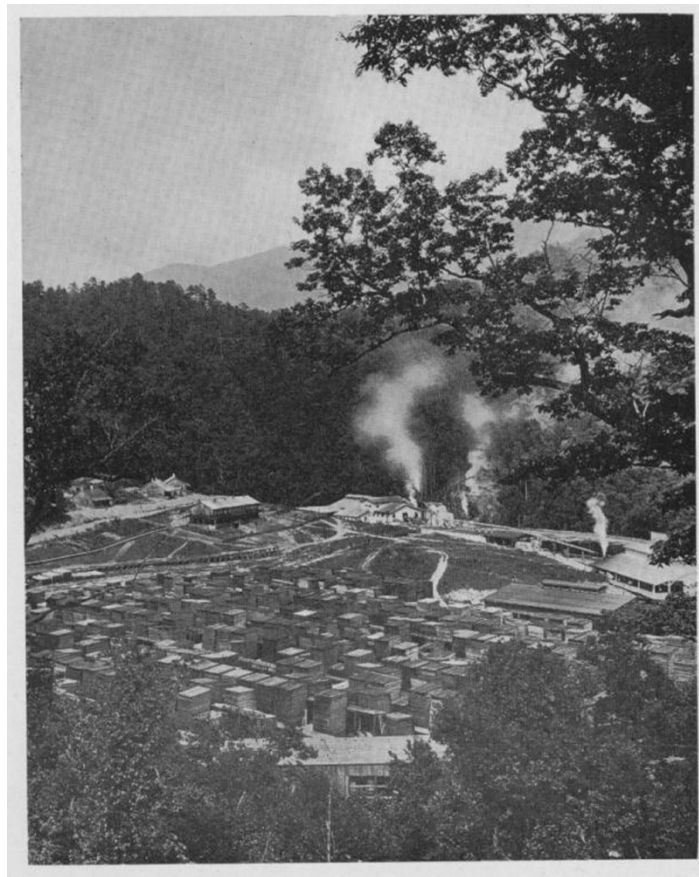


Figure 3.1. Partial view of Proctor ca. 1925, company town of the W.M. Ritter Lumber Company (*The Hardwood Bark* 5: September 1925, cover, Great Smoky Mountains NP library collections).

⁹⁴ Eller, *Miners, Millhands and Mountaineers*, 122.

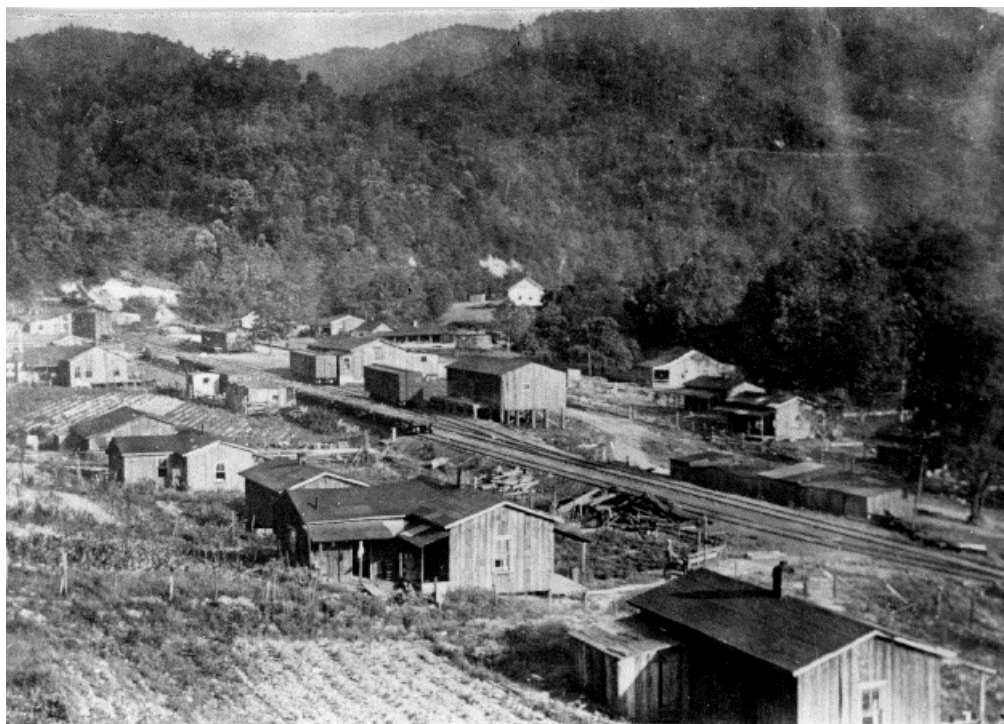
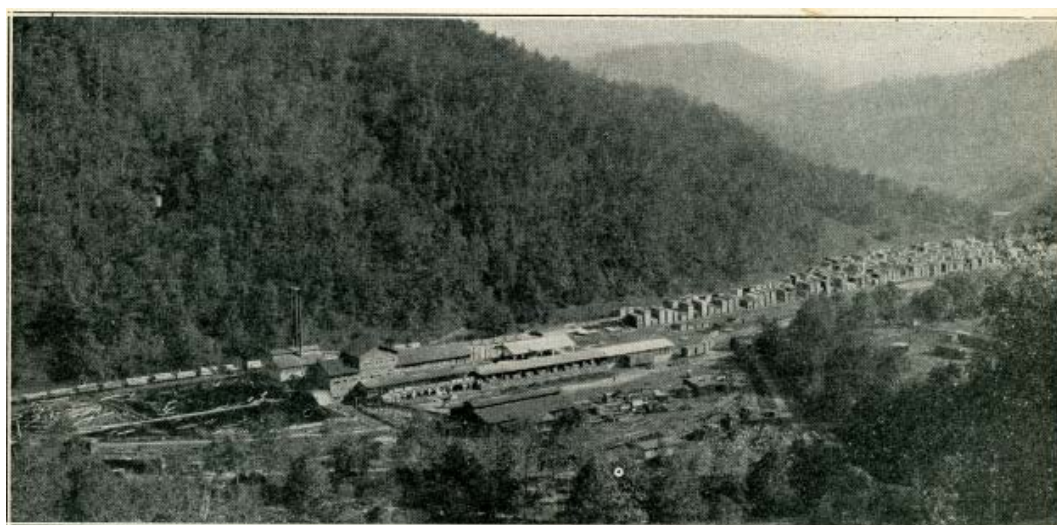


Figure 3.2. Village of Elkmont, Little River Lumber Company Logging Company (Great Smoky Mountains NP archive and library).



FORMER PULPWOOD AND LUMBER MILL OF THE CHAMPION FIBRE COMPANY
This Site is now being Converted into a Camping Ground by the National Park Service

Figure 3.3. Smokemont, company town of the Champion Fibre Company (Champion Fibre Co., *The Log* XV, April 1932, 2, Great Smoky Mountains NP library collections).

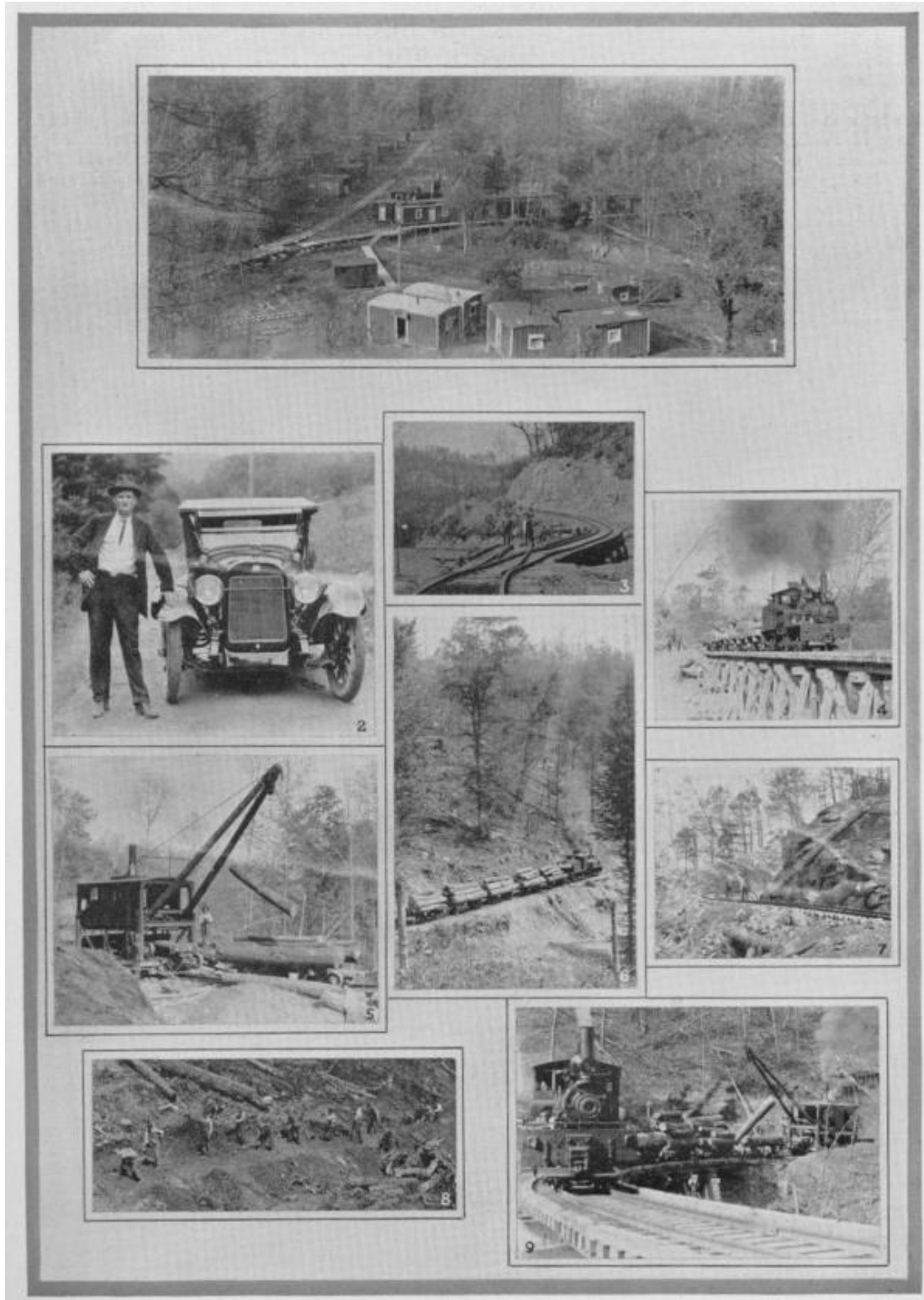


Figure 3.4. Big Branch Camp and surrounding logging activities, 1923. Big Branch Camp was a temporary "stringtown," or camp, of the W.M. Ritter Lumber Company (*The Hardwood Bark* 5: September 1925, 23, Great Smoky Mountains NP library collections).

Companies operating in this later period were responding to increased demand for wood products from several manufacturing sectors. Building construction was a substantial market that grew even larger because of a boom associated with World War I. The nascent aviation industry, which also benefitted from the war, relied extensively on spruce for construction of airplane fuselages. Perhaps most significant was the introduction of the kraft process (a.k.a., sulfate process) of paper manufacture in the late nineteenth century, which created a substantial demand for pulp wood derived from coniferous species such as hemlock. Paper-making also substantially changed the character of logging: trees of previously unmarketable size and species could now be cut profitably and clear-cutting thus became more common.

With more readily accessible timber stands in the northern states, West Virginia, and Kentucky depleted by 1900, lumber companies began to purchase large forested tracts in the Smokies. The newly formed United States Forest Service (USFS) also played a role in the surge of interest in the timber stands of the Smoky Mountains. USFS employees Horace B. Ayres and William W. Ashe, working under the USFS leader and famous forester and early conservationist Gifford Pinchot, surveyed the southern Appalachians in 1901 and wrote a widely publicized report documenting the need to manage timber riches of the Smoky Mountains. The report encouraged Congress to pass the Weeks Law of 1911 that funded the creation of forest reserves, but it also prompted a race between lumber companies to buy and exploit the timber stands. In Sevier County, for example, logging companies owned close to one-sixth of the land in the county by 1925. Within the future park, there were 18 timber and pulpwood concerns holding about 85 percent of the land.⁹⁵ On the North Carolina side of what became the park, logging and pulp companies clear cut extensively in the watersheds of Twenty-Mile Creek, Eagle Creek, Hazel Creek, Forney Creek, the Oconaluftee River, and Big Creek. Large sawmills and mill villages operated at Fontana (mouth of Eagle Creek), Proctor on Hazel Creek, Smokemont (where the Bradley Fork joins the Oconaluftee), Ravensford on the Raven Fork of the Oconaluftee, and Crestmont on Big Creek. In Tennessee, the Little River Lumber Company's efforts on the east, middle, and west prongs of the Little River would constitute the bulk of activities in the park. As discussed below, this company would establish a large company town outside the park at Townsend and smaller camps within the park at Tremont and Elkmont.⁹⁶

Logging's economic and social impacts transcended the future park boundaries and were felt on a county and regional basis. In addition to the portable and permanent mills in the park, large permanent mills were established at the foothills of the mountains in cities such as Asheville, North Carolina, and Knoxville, Tennessee. Logging operations were sometimes subsidiaries of, or worked in concert with, manufacturing companies. For example, Canton, North Carolina, was established for paper-making and processed pulpwood cut from the Smokies. A tan-bark industry would also develop as an offshoot of the lumber industry and in turn foster a lively leather industry that settled in locales like Walland in Blount County, Tennessee, which hosted the Schlosser Tannery from the 1890s until around 1930. Sevierville in Sevier County, Tennessee, would emerge as a railroad transportation hub for the logging industry.⁹⁷

⁹⁵ Catton, *A Gift for All Time*, 46.

⁹⁶ Margaret Lynn Brown, *The Wild East: A Biography of the Great Smoky Mountains*, (Gainesville, FL: University of Florida Press, 2000) 49-51; Lambert, "Logging in the Great Smoky Mountains," 25-46. In addition to the report already cited, Robert S. Lambert published two articles: "Logging on Little River, 1890-1940," *East Tennessee Historical Society's Publications* 33 (1961): 32-42; and "Logging the Great Smokies, 1880-1930," *Tennessee Historical Quarterly* 21 (Dec. 1961): 350-63.

⁹⁷ Banker, *Appalachians All*, 112; Inez E. Burns, *History of Blount County Tennessee: From War Trail to Landing Strip, 1795-1955, Revised* (Maryville, TN: Inez Burns, 1957), 229-230; Eller, *Miners, Millhands and Mountaineers*, 122; Smoky Mountain Historical Society, *The Gentle Winds of Change: A History of Sevier County, Tennessee, 1900-1930*, (Maryville, TN: Printers, Inc., 1986), 103; Thomason and Associates, *Cultural Resource Assessment: Section 8b Foothills Parkway, Sevier and Cocke Counties, Tennessee* (Nashville, TN: Thomason and Associates, February 1995), 9; Williams, *Appalachia: A History*, 247.

Regionally, logging in southern Appalachia would peak about 1910. By 1920, the most accessible and profitable forests had been exploited. This, along with destructive logging practices, would result in the gradual decline of the industry in the region. Although some companies established programs of reforestation, many were content to simply clear cut and abandon their tracts, and move to the timberlands of the Pacific Northwest or other unexploited areas. Logging within the future park continued well into the 1920s, but most logging activities ceased in 1928 after John D. Rockefeller, Jr. made his \$4.5 million gift for the establishment of the park. However, some companies would retain logging privileges and continue operations well into the 1930s.⁹⁸

A lengthy discussion concerning the ancillary impacts and long-term legacies of logging (as well as other extractive industries in this period) is outside the scope of this document. However, the environmental devastation inflicted on the Smokies was dramatic and had far-reaching effects that should be acknowledged. The log slides and skidders required that long paths to be cleared down the mountainsides, and clearcutting left behind large quantities of flammable slash—treetops, limbs, and other unusable tree parts. The steam boilers that powered locomotives and skidders spewed out sparks, which caused many devastating forest fires that raged through the dried slash. As clearcutting became the norm, the open swaths of mountain side, particularly if burned over, were highly susceptible to erosion and the soils were severely degraded. Plant and animal populations diminished as the biotic web of the forest was fragmented. On the other hand, the railroads and roads that were created for the logging industry would also open the lands to vacationers who appreciated the region's scenery, recreational opportunities, and biological diversity. The destruction of Appalachia's great forests would ultimately catalyze the conservation movement and set the stage for the acquisition of forest tracts for the establishment of the Great Smoky Mountains NP.⁹⁹

Within the socioeconomic sphere, logging and sawmill operations provided paid employment to thousands of men (and many women) in the Great Smokies.¹⁰⁰ For many participants from communities within the Great Smoky Mountains, the logging industry was accompanied by a movement from farms to the lumber camps and related company towns that brought new social experiences and habits and material expectations, for good or ill. Local residents not directly involved in logging sold farm produce—dressed pork, honey, apples, grapes, butter, and eggs—to the logging camps. However, such gains were offset by the environmental degradation that resulted from logging, which would have a detrimental impact on the ability of established residents to pursue their traditional way of life.¹⁰¹

Logging Activities within Great Smoky Mountains National Park

This section provides a discussion of logging and related community development in Great Smoky Mountains NP. As with the settlement that preceded it, logging activities were organized geographically according to watershed. The following discussion follows this geographic sequence, which was also utilized in chapter two. It begins with the Oconaluftee River watershed in North Carolina and proceeds clockwise through the park.

The Raven and Straight Forks of the Oconaluftee River and Ravensford, 1909–ca. 1930 (Swain County, NC). In 1909, the West Virginia firm Parsons Pulp and Paper Company acquired large tracts of land in Swain County on the Raven and Straight Forks of the Oconaluftee River. Between 1909 and 1918, the company established a saw mill and village at Ravensford. At its peak of activity,

⁹⁸ An unofficial condition, or gentlemen's agreement, underlying Rockefeller's donation was that the two state park commissions would ensure the cessation of logging in the park. Catton, *A Gift for All Time*, 44; Eller, *Miners, Millhands and Mountaineers*, 110, 123.

⁹⁹ Davis, *Where There Are Mountains*, 163-169; Eller, *Miners, Millhands and Mountaineers*, 110.

¹⁰⁰ It should be emphasized here that the loggers were not always native to the county or region.

¹⁰¹ Dykeman and Stokely, *Highland Homeland*, 120.

Ravensford had a double band saw mill with a capacity of 2 to 3 million board-feet per month, a boarding house, a commissary, and about 40 houses. The Appalachian Railroad serviced the company's holdings, running from Ravensford up the Straight Fork of the Oconaluftee and along its tributary, Balsam Corner Creek, to the timber stands. Ravensford Lumber Company, a successor to Parsons Pulp and Lumber, held the property when it was sold to the park commissioners.¹⁰²

The Oconaluftee River and Smokemont, ca. 1905–ca. 1928 (Swain County, NC). The Oconaluftee River watershed hosted the largest lumber company to operate within the Smoky Mountains. This area had first been logged selectively for hardwoods in the early 1900s by the Harris-Woodbury Lumber Company (on the Bradley Fork) and Three M Lumber Company (on the upper Oconaluftee and Collins Creek). About 1917, the huge Champion Fibre Company consolidated large tracts of land in the watershed to access hemlock and spruce for paper-making. Peter G. Thompson, owner of the Champion Coated Paper Company of Ohio, established the Champion Fibre Company as a subsidiary in 1905 after visiting western North Carolina to search for timberland. During the next decade his new company acquired more than 300,000 acres of mountain land in North Carolina and Tennessee and its holdings would comprise almost twenty percent of the present national park. This land extended outside the Oconaluftee into other watersheds (discussed below). A second subsidiary, Champion Lumber Company, handled the logging operations.¹⁰³ Champion Fibre Company established extensive infrastructure to support its endeavor and was described as “the most gigantic enterprise which western North Carolina has seen.”¹⁰⁴ Its narrow-gauge Oconaluftee Railway extended north up the river past Ravensford with branches on the Bradley Fork and Kephart Prong tributaries.¹⁰⁵ Within the park, the company founded the mill village of Smokemont adjacent to the river (now the site of the Great Smoky Mountains NP campground of the same name, see figure 3.3), where a large pulpwood and lumber mill, commissary, hotel, boardinghouse, and multiple residences were constructed. From 1920-1925, an estimated 116.9 million board-feet of lumber was processed at the band saw mill, which had a capacity of 35,000 board feet per day.¹⁰⁶ Much of the wood was shipped via the Southern Railroad to Canton, North Carolina, outside the future national park. This company town was the site of Champion's huge pulp mill, which consumed between 300 and 350 cords of wood and produced 200 tons of paper pulp daily. The pulp was initially shipped to Ohio for paper manufacture, but after c. 1930, the Canton plant began to produce postcard paper and grew into the largest paper and pulp mill in the country. Champion ceased operations in the park in 1928.¹⁰⁷

Hazel Creek and Proctor, ca. 1890–1928 (Swain County, NC). From ca. 1890 until ca. 1900, the firms Taylor and Crate, W.C. Heiser, and Block Mountain Timber Company performed selective hardwood logging of poplar, ash, and cucumberwood (a.k.a., cucumber magnolia, yellow cucumbertree, yellow-flower magnolia, and mountain magnolia) along Hazel Creek. Splash dams were established on Hazel Creek near the tributary of Walker Creek, on Bone Valley Creek, and just below Proctor.¹⁰⁸

¹⁰² Brown, *The Wild East*, 54; Eller, *Miners, Millhands and Mountaineers*, 106; Lambert, “Logging in the Great Smoky Mountains,” 30-32.

¹⁰³ Champion also acquired holdings to the west on Deep Creek and Noland Creek, some of which are outside the present park boundaries. These areas were accessible from the Southern Railroad and had been selectively logged for hardwoods in the 1880s and 1890s. A mill was located adjacent to the railroad at the mouth of Noland Creek (now within Fontana Lake). Eller, *Miners, Millhands and Mountaineers*, 108; Lambert, “Logging in the Great Smoky Mountains,” 36-37.

¹⁰⁴ Eller, *Miners, Millhands and Mountaineers*, 108.

¹⁰⁵ Lambert, “Logging in the Great Smoky Mountains,” 33-36.

¹⁰⁶ Brown, *The Wild East*, 54; Lambert, “Logging in the Great Smoky Mountains,” 36.

¹⁰⁷ Eller, *Miners, Millhands and Mountaineers*, 109; Frome, *Strangers in High Places*, 167; Oliver, *Hazel Creek*, 56.

¹⁰⁸ Lambert, “Logging in the Great Smoky Mountains,” 40; Oliver, *Hazel Creek*, 12, 35, 40, 48-51, 55-58.

Beginning in 1903, the William M. Ritter Lumber Company (W.M. Ritter Lumber Co.) began acquiring timber rights and land in the watershed. W.M. Ritter Lumber Co. was one of the largest logging companies in the greater Appalachian region. Pennsylvania lumberman William Ritter, known as “the dean of the hardwood lumbermen of America,” organized this company in West Virginia in 1890 which went on to acquire large swaths of timber property or rights in West Virginia, Virginia, Kentucky, and Tennessee that totaled over two billion board feet of hardwood timber by 1913. During his company’s operation, Ritter established more than twenty-eight mills in the southern Appalachian region and shipped his products internationally.¹⁰⁹

A subsidiary firm of Ritter’s called the Hazel Creek Lumber Company pursued his interests in the Smokies and actual logging operations began ca. 1910. Between this date and ca. 1920, the Hazel Creek Lumber Company turned the mountain village of Proctor from a sleepy hamlet of four or five houses to a thriving company town of more than 1,000 (figure 3.1). The site hosted a double-band sawmill with a capacity of 100,000 board feet per day, a planing mill, drying kiln, railroad depot, commissary, community building/movie theater, Baptist church, club house, and housing for workers and foremen. Hardwood flooring was a particular specialty of the company. Hazel Creek Lumber Company’s rail line, the Smoky Mountain Railroad, ran almost 20 miles up Hazel Creek from its connection with the Southern Railroad to the foot of Siler’s Bald, bringing out timber and providing passenger service as far as Medlin. Between 1911 and 1926, the company employed thousands of laborers who extracted and processed about 210 million board-feet of lumber. The company halted operations on Hazel Creek in 1926 and sold its land. Population figures are not available, but Proctor lost a substantial number of inhabitants and buildings such as the movie theater and clubhouse closed for want of customers and were eventually torn down. However, a sufficient population remained that as many as four stores continued to operate in Proctor and the immediate vicinity. Some of the families or persons known to have remained in the area were Fernham Farley, W. A. Franklin, George Rogers, the Woodward family, and the Kress family. The entire population of Hazel Creek relocated after the Fontana Dam was built and the area north of the Little Tennessee River was added to the park.¹¹⁰

Eagle Creek and Fontana, 1904–1925 (Swain County, NC). Eagle Creek was selectively logged for poplar by unknown companies prior to 1904. Between 1904 and 1906, the Montvale Lumber Company acquired 27,000 acres of land in the Eagle Creek watershed. This firm was a subsidiary of the R.E. Wood Lumber Company of Baltimore Maryland, one of the largest lumber dealers on the East Coast. The company established a mill at the creek mouth adjacent to the Southern Railway at the Little Tennessee River, resulting in the founding of the settlement of Fontana. This community, which extended about 1 mile up the creek, is now under Fontana Lake. A narrow-gauge railroad extended 14 miles up the main stem of the creek and had several spurs on the creek tributaries. Logging continued until 1925 and a total of about 100 million board-feet of timber were reportedly removed. After the discontinuance of logging, the railroad serviced the Fontana Copper Mine (discussed below).¹¹¹

The Little River: Townsend, Tremont, and Elkmont, 1901–1929 (Blount/Sevier County, TN). The Little River watershed, including Laurel Creek and the West, Middle, and East Forks of the Little River, hosted several small-scale hardwood logging operations utilizing teams and splash dams prior to ca. 1901. In 1901, the Little River Lumber Company began large-scale operations in the area. This company had been founded in 1900 by veteran Pennsylvania lumberman W. B. Townsend in

¹⁰⁹ Eller, *Miners, Millhands and Mountaineers*, 104; W.M. Ritter Lumber Company, *The Romance of Appalachian Hardwood Lumber* (Richmond, VA: Garrett & Massie, 1940).

¹¹⁰ Brown, *The Wild East: A Biography of the Great Smoky Mountains*, 53; Eller, *Miners, Millhands and Mountaineers*, 41–42; Oliver, *Hazel Creek*, 51–53, 87–90. The latter work contains an extensive description of the village during the Ritter years.

¹¹¹ Lambert, “Logging in the Great Smoky Mountains,” 43–45; Eller, *Miners, Millhands and Mountaineers*, 106.

partnership with fellow Pennsylvanian John W. Fisher, who operated the Schlosser Tannery in nearby Walland, Tennessee. It was an innovator in applying new logging technology in the Smokies, making extensive use of log slides and incline and overhead skidders.¹¹²

The Little River Lumber Company's timber holdings amounted to approximately 80,000 acres of forest in Tennessee's Blount and Sevier Counties, both within and outside the Great Smoky Mountains. The company established its base of operations in Tuckaleechee Cove outside the present park boundary, where the village of Tuckaleechee was renamed Townsend and a band sawmill was built in 1903. This facility employed hundreds of men and produced as much as 120,000 board-feet of lumber daily. Also in the village was the company's combined office and railroad station. This wood frame cottage was located on Route 73, a few miles outside of the current park boundaries.¹¹³ Logging within the future Great Smoky Mountains NP was pursued first on the West Prong and Laurel Creek tributaries of the Little River and then shifted to the East Prong. The company established a semi-permanent camp called Tremont, then a second one ca. 1907 at Elkmont. A much smaller camp with a commissary was also established on Fish Camp Prong. The company built its 18-mile long Little River Railroad from the Southern Railroad at Marysville, Tennessee, through Walland and Townsend, and along the East Prong of the Little River to Elkmont at a cost of about \$360,000. The Little River Railroad would become an early carrier of tourist passengers and thus was an important factor in opening the Smokies to recreational uses (see Chapter Four).¹¹⁴

The Elkmont and Tremont camps each included a hotel for lumber buyers and other visitors, housing for workers, and a commissary, church, and school.¹¹⁵ Tremont had an equipment servicing facility and there were at least 20 camp houses clustered on tributaries of the West Fork. A two-story, 22-room hotel served as a boarding house. A multi-story building nicknamed the "House of Education, Salvation, and Damnation" was a multi-purpose grammar school, church, movie house, and recreation center. A baseball field adjoined the school.¹¹⁶ Elkmont provided a base of operations for logging in the upper watershed of the Little River (figure 3.2). This company town was located just north of the confluence of the main stem of the Little River and the Mids Branch, at the present-day location of Elkmont Campground. It included a post office, church, hotel, commissary, and houses and cabins for management personnel and laborers. There was also a large machine shop that could repair and rebuild locomotives, rolling stock, and skidders. In more remote operations areas, the company, like others in the region, utilized temporary "stringtowns" that were moved along the railroad lines. Company scrip was prevalent.¹¹⁷

Little River Lumber Company sold its holdings to the Tennessee Park Commission in the 1920s, including most of the facilities and equipment in Elkmont after ca. 1926. However, it retained the right to log on park lands through 1938, extending its operations a decade beyond those of any other company. Estimates of its total cut within the park from 1901 to 1938 range from 560 million to 1 billion board-feet of wood.¹¹⁸

¹¹² Eller, *Miners, Millhands and Mountaineers*, 107.

¹¹³ This building was listed in the National Register in 1974, but was subsequently destroyed by fire. Michael Cranberry, *National Register Nomination: Little River Lumber Company Office* (1974).

¹¹⁴ Banker, *Appalachians All*, 116-117; Robin Bible, "Stringtowns: Early Logging Communities in the Great Smoky Mountains" *Forest History Today* (Spring 2002), 31; Eller, *Miners, Millhands and Mountaineers*, 107.

¹¹⁵ Banker, *Appalachians All*, 119-120; Ed Trout, "Logging in Sevier County" (typescript, 1985, Great Smoky Mountains National Park, Gatlinburg, TN), 13-24; Eller, *Miners, Millhands and Mountaineers*, 107; Lambert, "Logging in the Great Smoky Mountains," 52-58; Bums, *History of Blount County*, 230-31.

¹¹⁶ Bible, "Stringtowns," 32.

¹¹⁷ Bible, "Stringtowns," 30.

¹¹⁸ Banker, *Appalachians All*, 119-122; Trout, "Logging in Sevier County," 13-24; Eller, *Miners, Millhands and Mountaineers*, 107; Lambert, "Logging in the Great Smoky Mountains," 52-58; Bums, *History of Blount County*, 230-31.

The Little Pigeon River, ca. 1901 (Sevier County, TN). Logging in the watersheds of the East and West Forks of the Little Pigeon River was largely conducted as small-scale, selective harvesting operations in contract with smaller mills in the area. Along the West Fork, such mills were located within the park at the site of present-day Chimneys picnic area and on Sugarland Mountain, and additional mills processed Smoky Mountain logs in the Gatlinburg vicinity and at Sevierville, Tennessee (both outside the park). The Champion Fibre Company would later acquire large holdings on the West Fork, but never commenced logging operations.

Small portable mills operated during the early 1900s in the Greenbrier Cove vicinity on the East Fork of the Little Pigeon River. Schieffelin and Smith, dealers in mountain timberlands, acquired lands of this vicinity about 1901, but completed little logging before selling their holdings to the Champion Fibre Company at an unknown date. Champion made plans for railroad-based logging operations on these tracts, but they were never implemented.¹¹⁹

Big Creek and Crestmont, ca. 1880–1918 (Haywood County, NC). Logging of specimen trees began in the Big Creek watershed (Haywood County) in the 1880s under the Scottish-Carolina Timber and Land Company. Scottish entrepreneur Alexander A. Arthur founded this firm after creating a logging and coal mining empire in Kentucky. However, his efforts in Haywood County were limited due to technological and operational difficulties. The North Carolina Land and Timber Company bought much of Arthur's holdings, but quickly sold them to the Cataloochee Lumber Company, which had more success.¹²⁰

In 1902, the Cataloochee Lumber Company extended a standard gauge railroad from Waterville, North Carolina, up Big Creek to Crestmont (present-day Big Creek), just inside the park boundary. The firm built a band saw mill at Crestmont and ran a logging railroad 3–4 miles up the valley. The company went bankrupt in 1904 and the Pigeon River Lumber Company bought its Big Creek holdings ca. 1907. The Pigeon River Lumber Company made a substantial expansion to the Crestmont mill, converting it to a double-band saw and adding a steam-heated drying kiln. The company extended the railroad to a point about 10 miles upstream of the mill and utilized the latest in mechanical logging equipment. The Pigeon River Lumber Company went bankrupt in 1911 and was sold to the Champion Fibre Company's subsidiary, Champion Lumber Company. This firm extended the railroad along several Big Creek tributaries to the flank of Mt. Guyot, which was logged across its east slope. The Suncrest Lumber Company acquired the Big Creek holdings in 1917 and terminated logging operations in the valley in 1918.¹²¹

Cataloochee Creek, ca. 1890–1929 (Haywood County, NC). Cataloochee Creek lay in a more remote portion of the mountains and industrial-scale logging did not arrive until later in the study period. In the early period of logging, anecdotal accounts describe several small-scale mills in the watershed processing on timber cut by local residents or during selective commercial harvesting. A water-powered saw stood above the gristmill on Palmer Creek, a steam-powered mill operated at Ola, and there were several portable mills that moved through the valley. One of the later and larger operations was that of Sheriff William Palmer, who operated a steam-powered sawmill on the Mack Hannah property in Little Cataloochee.¹²²

In the early 1920s, the Parsons Pulp and Lumber Company and the Appalachian Railroad (see discussion of the Raven and Straight Forks of the Oconaluftee River above) extended northeast out

¹¹⁹ Lambert, "Logging in the Great Smoky Mountains," 59-62.

¹²⁰ Davis, *Where There Are Mountains*, 163; Lambert, "Logging in the Great Smoky Mountains," 25-26.

¹²¹ Lambert, "Logging in the Great Smoky Mountains," 25-28.

¹²² Dianne L. Flaugh, *Cataloochee Historic District: Draft Cultural Landscape Report, Great Smoky Mountains National Park* (Atlanta, GA: U.S. Department of the Interior, National Park Service, 1999), 26.

of the Oconaluftee River watershed into the Cataloochee Creek watershed via Pin Oak Gap (the vicinity of present-day Balsam Mountain Road). Here, Parson's Pulp and Lumber Company operations were focused around the Lost Bottom (a.k.a., Moody) Creek Area. The Suncrest Lumber Company also held about 26,000 acres in the Cataloochee area and, around 1925, routed a branch of its railroad north into the watershed from the vicinity of Saco Gap up through Paul's Gap (present-day Heintooga Ridge Road). Suncrest's sawmill was at Waynesville, North Carolina. After 1928, the Suncrest Lumber Company mounted substantial opposition towards any cessation of logging in the park, but halted its activities in 1929 after a court order was issued.¹²³

Secondary Logging Areas. The Kitchen Lumber Company operated a hardwood logging operation on Twenty-Mile Creek, a North Carolina tributary of the Little Tennessee River in Swain County, for an unknown period prior to 1926. The company extended a logging railroad about 15 miles up the creek from its base of operations on the river (now flooded under Fontana Lake).¹²⁴ The woodlands of Forney Creek, Swain County, North Carolina, were subject to selective harvesting by unknown companies prior to 1900. The Norwood Lumber Company acquired these lands in 1906 and began logging in 1910 using inclines. The location of any mill associated with this operation is not known.¹²⁵

National Park Service and CCC Alterations to Logging Infrastructure

During the formative years of the park's development, most of the logging infrastructure in the park was removed. Many of the logging camps were located on ideal sites for park infrastructure and were demolished and used for recreational camps or other park facilities. The community of Ravensford, North Carolina, is completely demolished and its site is now the Great Smoky Mountains NP Oconaluftee maintenance facility and residential area. The only surviving resource associated with Ravensford is a single concrete Luten bridge across the Raven Fork of the Oconaluftee River (see discussion below). The Smokemont mill and village in North Carolina were removed, and the site now hosts the Smokemont Campground. Reportedly, restoration efforts by the NPS here included the removal of a steam locomotive, 40 railroad cars, milling equipment, several buildings and homes, and several miles of railroad track. Much of the smaller debris was buried on site; all that remains is the Luten concrete bridge across the Oconaluftee near the campground.

Proctor, North Carolina, was acquired by the NPS during the 1940s through its agreement with the TVA concerning the Fontana Dam. Prior to the NPS acquisition, the TVA oversaw salvage efforts of the buildings and burned the remainder. The Calhoun House, remains of the drying kiln, a pump house, valve house, and the log pond can still be seen at the site. Fontana is now flooded under Fontana Lake. The lumber camp at Tremont, Tennessee, is now the site of the Great Smoky Mountains Institute. The Little River Lumber Company sold portions of Elkmont, Tennessee, to groups of Knoxville investors who established the Appalachian Club and Wonderland resort communities. With the discontinuance of logging, the tracks were removed and buildings of the camp were gradually demolished ca. 1925–1942, although some residential “set-off” cabins from the camp were modified and incorporated into the “Daisy Town” portion of the Appalachian Club vacation community (discussed in chapter four). The primary camp site is now an NPS

¹²³ Catton, *A Gift for All Time*, 47; Eller, *Miners, Millhands and Mountaineers*, 109; Lambert, “Logging in the Great Smoky Mountains,” 32–33.

¹²⁴ Lambert, “Logging in the Great Smoky Mountains,” 46.

¹²⁵ Lambert, “Logging in the Great Smoky Mountains,” 38–39.

campground.¹²⁶ Big Creek Campground and Ranger Station occupy the site of the mill village at Crestmont, North Carolina, and no resources survive here from the logging operations.¹²⁷

The North Carolina and Tennessee public works departments and the Civilian Conservation Corps (CCC, present in Great Smoky Mountains NP between 1933 and 1942) converted many logging railroad beds into roads by widening and resurfacing them. Examples of such works include the Cataloochee Lumber Company's line up Big Creek (now the Big Creek Entrance Road to Big Creek Campground); the Little River Lumber Company's lines on the East, Middle, and West Prongs of the Little River (now the Little River Road and Elkmont Road); and the lines of the Parsons Pulp and Paper Company and Suncrest Lumber Company near Balsam Mountain (now the Heintooga Ridge Road).¹²⁸

MINING IN THE COUNTIES OF THE GREAT SMOKY MOUNTAINS, 1820–1944

As discussed in chapter one, the sequence of geological events that culminated in the creation of the Great Smoky Mountains has produced a diverse range of rock formations and associated mineral types that had potential value for subsistence use or extractive industries. Although the footprint of mining activities within the land areas making up Great Smoky Mountains NP was relatively small compared to the scale and intrusion of logging, there was substantial interest in locating mineral resources in the mountains. By one account, there are more than 100 inactive or abandoned mines near the national park. Within the present park boundaries, evidence for most of these activities is meager or non-existent and includes little in the way of surviving cultural material that falls within the scope of this HRS. All known mining and quarrying locations within the park are briefly discussed below, however, as part of the general context for those resources that remain.¹²⁹

The most important mineral resource within and near the park were its metallic sulfide ores, which were associated Copperhill Formation, a dark-gray slaty metasiltstone within the Great Smoky group. These were exploited during the late nineteenth and early and mid-twentieth centuries for production of copper and limited amounts of zinc. A second mineral resource of some consequence in the history of the Great Smoky Mountains was limonite, an iron ore, which was utilized at least two park sites during the nineteenth century. Mineral salts produced by sulfide rock were a minor mineral resource. Lastly, the metasedimentary slates, shales, and sandstones provided a source of easily worked building stone and were quarried at several locations within and close to the park, although the temporal period for this activity is not well documented.¹³⁰

The mining history of the park parallels the broad contours of extractive industries generally in Southern Appalachia. The first documented mining activity (and extractive industry generally) in the region was for iron ore, commenced in East Tennessee between 1790 and 1811, and continued until

¹²⁶ M. Todd Cleveland, *Cultural and Historic Landscape Assessment for the Elkmont Historic District, Great Smoky Mountains National Park, Sevier County, Tennessee* (Submitted to Great Smoky Mountains National Park, Gatlinburg, TN by TRC Garrow Associates, Inc., Atlanta, GA, 2004); Eller, *Miners, Millhands, and Mountaineers*, 108-9; Lambert, "Logging in the Great Smoky Mountains," 36; Daniel S. Pierce, *The Great Smokies: From Natural Habitat to National Park*, (Knoxville, TN: University of Tennessee Press, 2000), 177-178.

¹²⁷ Lambert, "Logging in the Great Smoky Mountains," 25-27; Oliver, *Hazel Creek*, 92-93

¹²⁸ Catton, *A Gift for All Time*, 70; Cornelius Maher and Michael Kelleher, "Great Smoky Mountains National Park Roads & Bridges," HAER No. TN-35 (Washington, DC: National Park Service, U.S. Department of the Interior, 1996), 22-33.

¹²⁹ Seal et al, Preliminary Report on Water Quality Associated with the Abandoned Fontana and Hazel Creek Mines, Great Smoky Mountains National Park, North Carolina and Tennessee (Reston and Denver, CO: US Geological Survey, 1998), 5.

¹³⁰ Southworth et al, *Geologic Map of the Great Smoky Mountains National Park Region, Tennessee and North Carolina*. Pamphlet to Accompany Scientific Investigations Map 2997, (Reston, VA: US Geological Survey, 2012) 16; Taylor et al. "Volcanic-Associated Massive Sulfide Deposits," in Preliminary Compilation of Descriptive Geoenvironmental Mineral Deposit Models, ed. Edward A. du Bray (Denver, CO: US Geological Survey, 1995).

ca. 1880. Within the future park lands, iron mining and smelting were concentrated in Tennessee's Blount and Sevier counties and were active ca. 1820–1845. Mineral salts were exploited in the early nineteenth century and up through the Civil War for use in patent medicines and saltpeter, an ingredient in gunpowder. In what is now Great Smoky Mountains NP, mineral salts were mined at Alum Cave on Mount Le Conte, Sevier County, Tennessee, between the 1830s and the Civil War. During the 1850s, there was a sudden increase of interest in minerals including zinc, copper, tin, silver, and gold within the Southern Appalachians and large numbers of prospectors infiltrated the area. Accounts of this activity are largely anecdotal and the exact reasons for the activity are not known, but the presence of iron ore in the area, the imminent arrival of the ETV&G Railroad, and the identification of the Ducktown copper ores were likely factors. Within the future park, Rich Mountain between Cades Cove and Tuckaleechee Cove, Tennessee, was prospected or mined during this time. Dr. Calvin Post, a physician and mineralogist from Elmira, New York, came to Cades Cove in 1846. Post made extensive but largely unsuccessful explorations of the Cove environs in the hope of finding deposits of gold, silver, copper, and iron, and corresponded with or represented New York mineral companies who he hoped would be attracted to the region. Leases issued at this time for lands within the Cades Cove area include references to mineral rights. Thomas Lanier Clingman, for whom Clingmans Dome is named, was a mining prospector as well as a booster, businessman, and U.S. senator. He explored the mountains extensively in this period. Despite the intense scrutiny, there were no new mines established in what would become the park in the two decades leading up to the Civil War.¹³¹

After the interruption of the Civil War years, prospecting and mining continued at a heightened pace in line with regional trends. However, Tennessee's Blount, Sevier, and Cocke counties witnessed no substantial mining activities between 1865 and the establishment of the park. In Western North Carolina, mining of copper ore became the chief minerals extraction activity and occurred primarily within the future park boundaries in Swain County, as discussed below. Haywood County, North Carolina, also fared well. There, the Redmond Lead-Zinc Mine at Shelton Laurel was discovered in 1905 and worked until 1943 (with a brief re-opening in 1951) in campaigns by three companies: Rathbone & Adkins; the U.S. Smelting, Refining, and Mining Company, and the Haywood Mining Corporation. Much of the ore was shipped to the Ozark Smelting and Refining Company in Kansas.¹³² Mica extraction was also a noteworthy industry in the early twentieth century: the Franklin-Silva mining district for mica extended across Haywood, Jackson, and Macon counties in North Carolina and produced about 15 to 20 percent of the state's mica production between 1925 and 1965.¹³³

Copper Mining in Swain County, North Carolina, ca. 1889–1944

Mining of copper ore was historically the most important extractive industry in Swain County and several of the county's copper mines were within the future boundaries of Great Smoky Mountains NP. The copper deposits exploited were of the massive, metallic sulphide type (sometimes referred to as the Appalachian sulfide coppers) and comprised a small example of a grouping of such ores that were deposited in belts along the eastern piedmont of the Appalachian chain from Newfoundland, Canada, to Alabama (figure 3.5). Sulfide ores were largely unusable for copper production in colonial America—an elaborate and costly pyritic ore smelting process developed at Swansea in Wales would give England a monopoly of copper production for two centuries. Once introduced into the United

¹³¹ Dunn, *Cades Cove*, 80, 86–87, 270; Frome, *Strangers in High Places*, 104–105.

¹³² Jarvis B. Hadley and Richard Goldsmith, "Geology of the Eastern Great Smoky Mountains, North Carolina and Tennessee," *Geological Survey Professional Paper 349-B*, (Washington, DC: US Government Printing Office, 1963), 112; Medford W. Clark, *The Middle History of Haywood County, North Carolina* (Waynesville, NC: Medford W. Clark, 1968), 7.

¹³³ Jasper Leonidas Stuckey, *North Carolina: Its Geology and Mineral Resources*, (Raleigh, NC: Department of Conservation and Development, 1965), 419–420.

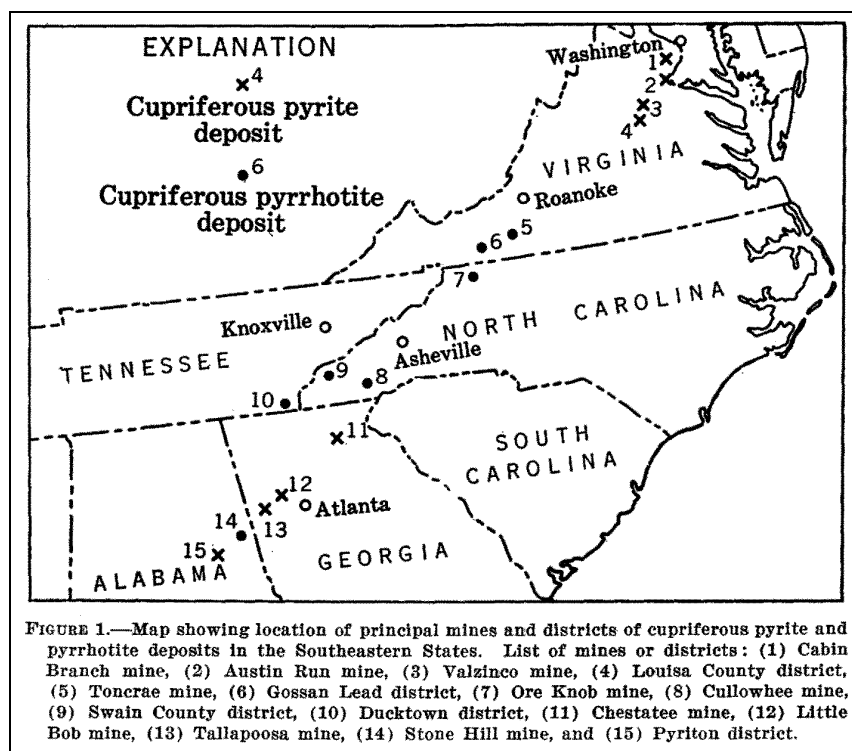


Figure 3.5. Map of principal mines and districts for massive sulfide copper ores in Southern Appalachia (Espenshade, *Geology of Some Copper Deposits in North Carolina, Virginia, and Alabama*, 14).

States, smelting of these ores was a costly, energy-intensive, and complicated process. Therefore, the successful exploitation of sulfide ores in the Great Smoky Mountains and elsewhere depended on a calculus of technological capability for extraction and smelting; market supply and demand; and the costs of raw materials, labor, and transportation.¹³⁴

The metallic sulfide ores are one of two categories of copper ores exploited historically in the eastern United States. The other category was the “oxide” ores (green malachite, blue azurite, reddish black cuprite, or native metal). These ores were less common in the eastern United States than the sulfide type but could be converted to copper through relatively simple direct smelting and were thus the more desirable of the two types.¹³⁵

The search for copper was an early focus of miners and entrepreneurs in North America. Not surprisingly, early American copper mines were of the oxide type. The first productive American copper orebody was the Simsbury Mine, which was established around 1707 in Hartford County, Connecticut. Additional modestly scaled oxide ore mines would follow in Connecticut; Bellville, New Jersey (prospected in 1813); and northwestern Maryland (opened about 1750). The American Revolution would coincide with the practical exhaustion of the known oxide ore deposits.¹³⁶

¹³⁴ Gilbert H. Espenshade, “Geology of Some Copper Deposits in North Carolina, Virginia, and Alabama.” *Contributions to Economic Geology, Geological Survey Bulletin 1142-I* (Washington, DC: US Geological Survey, 1963); Otis R. Young, Jr., “Origins of the American Copper Industry,” *Journal of the Early American Republic* 3 (1983):118.

¹³⁵ Espenshade, “Geology of Some Copper Deposits,” Young, “Origins of the American Copper Industry,” 118.

¹³⁶ Young, “Origins of the American Copper Industry,” 123-125.

The period 1790–1840 was an unsettled one for copper mines and smelters in the United States. The increased use of copper sheathing on ships' bottoms and tariffs associated with the War of 1812 increased demand for domestic copper, but fuel and transportation costs were a hindrance and the technique for pyritic smelting remained elusive in the country. Domestic smelters recycled old copper or imported oxide ores. Thus, sulfide ores had no domestic market and the only foreign market was England, where there were already extensive ore deposits available. However, the opportunities were sufficient for entrepreneurs to continue to search for copper ore deposits along the Appalachian piedmont. The first substantial sulfide ore deposit was identified and entered production in Orange County, Vermont, from ca. 1795 to 1825.¹³⁷ Other substantial early nineteenth-century mining and smelting efforts took place in Hartford County, Connecticut, and in southeastern Pennsylvania.¹³⁸

After ca. 1845, American copper mines and smelters were able to leave the margins of the industry and compete directly with British producers. Improved transportation networks reduced the cost of coal. Because British ore deposits were nearing exhaustion, the British smelting industry organized a monopolistic trade association with strict price controls on ore and smelted copper, inadvertently creating a cost advantage for would-be American producers. Entrepreneurs built sizable pyritic smelters in several eastern seaboard cities during the 1840s and 1850s using Welsh and German technologies, thus creating a market for Appalachian sulfide ore. The Vermont mining district was substantially revived and expanded at this time. More importantly, the huge Ducktown, Tennessee, deposits were discovered in 1847, thus bringing awareness of the ore and its market potential to the Southern Appalachian region. Most of the ore extracted from this district in the nineteenth century was shipped to Baltimore for smelting.¹³⁹

While smelters were having some success in producing market-quality copper, smelting techniques were inconsistent in quality and not cost effective. The period 1860–1880 witnessed a number of improvements in ore processing and the design of smelting furnaces, although the sulfide mines themselves were moribund at this time due to exploitation of large deposits of native copper and oxide ores in upper Michigan. One noteworthy experiment in ore processing took place at the Ore Knob Mine in Ashe County, North Carolina. In the 1870s, mine operators leached copper ore with a mixture of hot “copperas” and brine as a means to extract copper from the raw ore.¹⁴⁰

The development of the electrical power industry introduced an unprecedented demand and price surges for copper at the end of the nineteenth century and during World Wars I and II. As Michigan's high-grade ores were played out, there was a resurgence of investigations into more efficient extraction and smelting of low-grade sulfide ores in the Appalachian region and the American West. These factors were important in making the copper ores of the Great Smoky Mountains worthy of investigation.¹⁴¹

State geologists have classified North Carolina copper deposits into three bands or regions according to native rock type and location within the state: the Eastern Zone; the Central Zone; and the Western Zone (the latter inclusive of the Great Smoky Mountains). The Eastern Zone was concentrated in the so-called Virgilina District in parts of Granville and Person counties and in the Gold Hill and Cid districts of Cabarrus, Rowan, Stanly, and Davidson counties. Mines in the Eastern

¹³⁷ The ore at this location was initially exploited for the manufacture of “copperas” (iron sulfate), not copper. Copperas was used in tanning, inks, and dyes.

¹³⁸ Young, “Origins of the American Copper Industry,” 128-130.

¹³⁹ Ducktown is in Polk County in southeastern Tennessee and outside of this report's study area. Young, “Origins of the American Copper Industry,” 130-132.

¹⁴⁰ Young, “Origins of the American Copper Industry,” 132-136.

¹⁴¹ Matthew A. Kierstead, “History and Historical Resources of the Vermont Copper Belt” *Society of Economic Geologist Guidebook Series* 35 (2001), 176-181, Young “Origins of the American Copper Industry,” 137.

Zone were exploited as early as 1852 or 1853, but the bulk of the activity seems to have occurred from about 1890 to 1910, with small amounts of exploratory work during the 1940s and 1950s. The Central Zone was a marginal production area and hosted a number of small gold and copper mines in Guilford, Cabarrus, and Mecklenburg counties during the early and mid-nineteenth century. The Fentress or North Carolina Mine in this zone was reputedly the first to be exploited for copper in the state, although its opening date is not known.¹⁴²

The Western Zone was historically the most important of the three regions and all of the noteworthy copper deposits were of the sulphide type (figure 3.6). Many of the substantial mines were prospected or opened before 1860, making the Fontana and Adams mines in Swain County relative latecomers, but important nonetheless. Between 1890 and 1940 there was intermittent production of copper in the region. By the 1940s, only the Fontana mine was producing ore.¹⁴³ In addition to the Fontana and Adams mines, important copper-producing mines in North Carolina's Western Zone included the Cullowhee Copper Mine and the Ore Knob Mine. The Cullowhee Copper Mine was located in southern Jackson County on Cullowhee Mountain about 2 miles from East LaPort. The mine may have opened before the Civil War, but no details are available concerning its early operation. It was worked between 1900 and 1910 to a small extent, at which time a small smelter operated. The Tennessee Copper Company reopened the mine briefly from 1929–1930 and extracted 4,500 tons of ore containing 4 percent copper, which was shipped off the premises for smelting.¹⁴⁴

The Ore Knob Copper Mine was a highly productive lode located in Ashe County, North Carolina, seven miles east of Jefferson. Perhaps the best known of the state's copper mines, it first opened in 1855 shortly after the discovery of Ducktown but closed a year later due to its inaccessibility. It reopened in several campaigns under various owners in 1873–1881, 1896, 1913, 1917–1918, 1927, 1942–1943, and 1953–1962. The mine was abandoned after 1962 when testing determined that the usable ore was exhausted. The 1873–1881 campaign uncovered some remarkable ores that attracted the attention of geologists and mining engineers. During this effort, more than 200,000 tons of ore

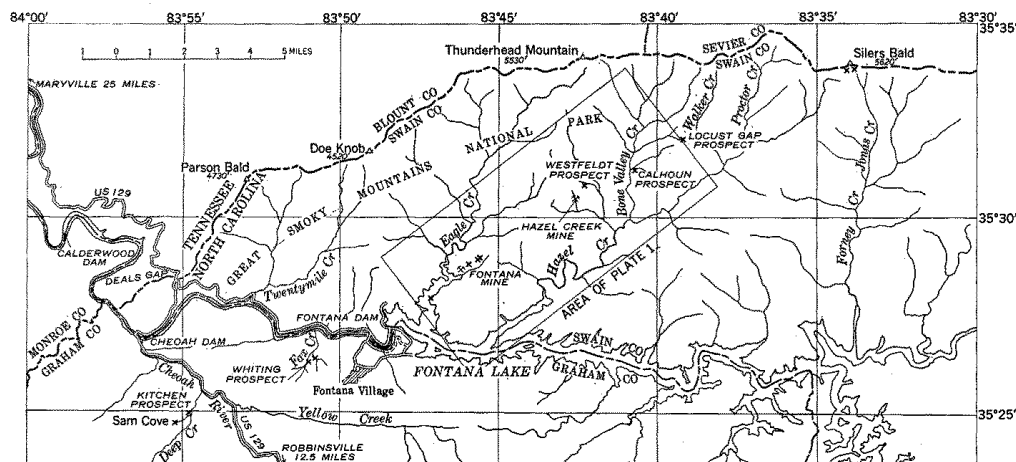


FIGURE 2.—Mines and prospects of Swain and Graham Counties, N.C.

Figure 3.6. Map of copper mines and prospects in Swain and Graham Counties, North Carolina (Espenshade, *Geology of Some Copper Deposits in North Carolina, Virginia, and Alabama*, 115).

¹⁴² Stuckey *Mineral Resources of North Carolina* 281, 286–289.

¹⁴³ H.S. Rankin and C.E. Hunter. "General Information About North Carolina Copper Deposits" (typescript, July 20, 1942). On file in the Mineral Commodity Files at the North Carolina Geological Survey - Division of Energy, Mineral, and Land Resources; Stuckey, *North Carolina*, 282–286.

¹⁴⁴ Rankin and Hunter, "North Carolina Copper Deposits"

were mined and yielded approximately 12,500 tons of copper. A small smelter was located at the mine and was the site of experimental refining (see discussion above). In the 1953–1962 campaign, an additional orebody was identified that contained an estimated 1.3 million tons of ore, but the production volumes relating to this period are not known. However, the volume was sufficient to justify construction of a new crushing and milling plant.¹⁴⁵

In addition to these more substantial operations, there were exploratory or small-scale efforts at four other locations in North Carolina's Western Zone. The Savannah Prospect in Jackson County was partially explored about 1900–1910 and the ore vein(s) were found to contain about 5 to 10 percent copper. The Elk Knob Copper Prospect in western Ashe County was partially explored sometime before 1900 and then re-explored about 1940 to 1953. The Wayhutta Copper Prospect was in Jackson County and contained a vein of about 6 feet in width, but had a small overall ore body that would not have been cost effective to mine. Within the boundaries of the park, several prospects were explored in the early twentieth century for possible copper ores, but these provided no substantive results. A brief discussion of the prospects in the park is provided below.¹⁴⁶

North Carolina copper production has never been large in the national context. Comparison among the state's copper mines on the basis of production is difficult, since production records are incomplete and no records were kept in the late nineteenth century. The total recorded state production for the 19 years in which statistics were recorded was just over 5.1 million pounds of copper, with a value of approximately \$836,000. Yearly production figures were highly sporadic, but averaged 246,268 pounds (123.3 tons) of copper annually for the years recorded (1901–1910, 1912, 1914–1917, 1919, 1923, 1942–1944, 1954, 1955). The lowest recorded production year was 1955, when 300 pounds of copper was produced. The highest production year was 1902, when 1,417,020 pounds were produced. The greatest periods of production were between 1873 and 1883 and 1925 to ca. 1945.¹⁴⁷

The Adams Copper Mine, Sugar Fork of Hazel Creek, ca. 1889–1944 (Swain County, NC). The Adams Copper Mine (a.k.a., Hazel Creek Mine or Everett Mine) is located in northern Swain County in the headwaters of Hazel Creek, about 5 miles north of Proctor (figures 3.6 and 3.7). The history of the mine is marked by a relatively long period of exploratory activity and a brief period of active development.

A man named Fonzie Hall reportedly discovered the orebody in the late 1880s while out prospecting for mica. He found an outcrop of gossan on Hazel Creek and, thinking it gold, brought it to a local mineral expert who told him it was copper.¹⁴⁸ At this time the land was owned by Ep Everett, a Bryson City resident and timberlands speculator.¹⁴⁹ In 1899, a mineral developer from Boston named Walter S. Adams heard of the prospect and bought 200 acres of land in the area. Adams formed the North Carolina Mining Company around 1901 and, between 1900 and about 1920, explored his property by means of a series of trenches and shallow open cuts. A New Orleans resident named George Westfeldt owned lands adjoining those of Adams and contested Adams'

¹⁴⁵ Rankin and Hunter, "North Carolina Copper Deposits"; Stuckey, *North Carolina*, 283–284.

¹⁴⁶ Espenshade, "Geology of Some Copper Deposits," 35–36. Rankin and Hunter, "North Carolina Copper Deposits." Sulfide deposits may also contain lead and/or zinc ores. A small deposit of this type was exploited between 1905 and 1943 at the Redmond Mine near Shelton Laurel, North Carolina, just outside the park boundaries. Southworth et al., *Geologic Map of the Great Smoky Mountains*, 27.

¹⁴⁷ Production activity, but no amounts, was recorded for the years 1851, 1852, and 1873–1882. P. Albert Carpenter, "Metallic Mineral Deposits of the Carolina Slate Belt, North Carolina. Bulletin 84" (Raleigh, NC: North Carolina Department of Natural and Economic Resources, Division of Resource Planning & Evaluation, Mineral Resources Section, 1976), 14–15, Table 1; Stuckey, *North Carolina*, 281–293.

¹⁴⁸ Gossan is the result of the surface weathering of an overlying sulfide deposit. The sulfides leach out, leaving a hydrated iron oxide material. Gossan can be used by prospectors as an indicator of ores below the surface.

¹⁴⁹ Lance Holland, Fontana: A Pocket History of Appalachia (Robbinsville, NC: Appalachian History Series, 2001), 45; Oliver, Hazel Creek, 51–53.

development, arguing that he, Westfeldt, owned the prospect. Westfeldt's lawsuit delayed any working of the mine before the case was settled in 1927. Some additional prospecting was performed during the 1920s through driving of ten adits and seven shafts.¹⁵⁰ In 1929 and 1930, the Ducktown Chemical and Iron Company drilled more exploratory holes, locating some additional undeveloped deposits. However, the lack of clear land title inhibited extraction and, up until 1930, the total mine production was only about 1,000 tons. The suppressed demand and prices for copper due to the Great Depression temporarily halted further exploration or development during the 1930s.¹⁵¹

From December 1942 through 1943, the North Carolina Mining Company reexamined all the identified deposits within the claim and found that the ore also contained substantial quantities of zinc. Based on the evaluations, the mine was determined to be an opportune site for immediate development in support of the World War II effort. With assistance from the U.S. Reconstruction Finance Corporation, the company extracted and shipped 21 carloads of high-grade copper ore of more than 5 percent copper to an outside smelter between 1942 and 1944. This production totaled 1,278 tons of ore that were converted to just over 248,000 pounds of copper worth approximately \$49,000—a modest output in the context of the state production figures for the period. The net return was about \$19,000.¹⁵²

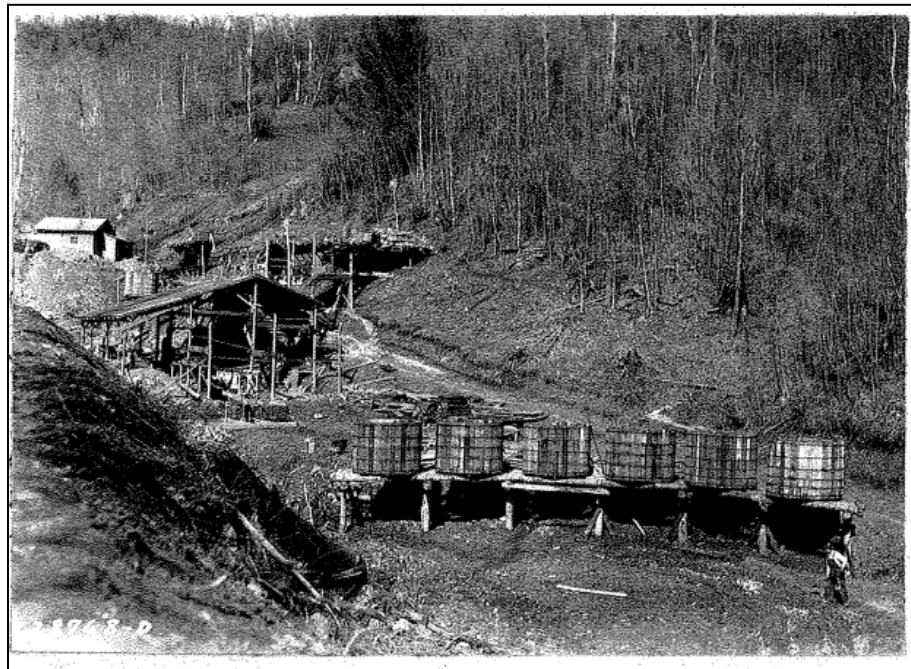


Figure 3.7. 1944 view of Adams Copper Mine headworks, looking northwest (Fox et al., *Geology and Ore Deposits of the Hazel Creek Land Company, Tact FR-1132, Westerfeldt Prospect, and a Portion of the Adams Mine*, plate 6).

¹⁵⁰ An adit is a horizontal or nearly horizontal passage driven from the surface for working of the mine or dewatering.

¹⁵¹ Holland, Fontana, 46-49; Rankin and Hunter, "North Carolina Copper Deposits."

¹⁵² Espenshade, "Geology of Some Copper Deposits," 30-32; Portland P. Fox, Earl C. Van Horn, and Robert E. Barnett, *Geology and Ore Deposits of the Hazel Creek Land Company, Tract FR-1132, Westerfeldt Prospect, and a Portion of the Adams Mine* (Knoxville, TN: Tennessee Valley Authority, Water Control Planning Department, Geologic Division, March 1944), 16; G.H. Espenshade, M.H. Staatz, and E.A. Brown, *Preliminary Report: Hazel Creek Mine, Swain County, North Carolina* (Washington, DC: US Geological Survey, April-June, 1943), 2-3; Holland, Fontana, 46-49; Joe Livingston, "The Copper Mine at Eagle Creek," last modified May 2002, http://www.ecjones.org/scenery/_Great_Smoky_Mtns_NP/_Eagle_Creek/Fontana_Mine/Fontana_Copper_Mine.pdf; Rankin and Hunter, "North Carolina Copper Deposits,"; Stuckey, North Carolina, 285; Oliver, Hazel Creek, 51-53.

Lumber Company ca. 1925, which extracted a small amount of ore before leasing the mine in 1926 to the Fontana Mining Corporation, an affiliate of the large Ducktown Chemical and Iron Company. The Fontana Mining Corporation purchased the mine outright in 1928 and operated the works profitably until 1931. During this period, the mine produced just over 297,000 tons of ore with an average “carry” of 7.485 percent copper, for a total production of just over 44,000 pounds of copper. In 1931, an affiliate of the Tennessee Copper and Chemical Corporation, the North Carolina Exploration Company, purchased the mine. Under the new owners, the mine produced just over 286,000 tons of ore (about 200 tons of copper ore per day) of similar quality to the earlier campaign and the ore was smelted at the parent company’s facility in Copperhill, Tennessee, in the Ducktown District. The total yield of the mine from 1926 through 1944 was 583,505 tons of ore producing 83,516,000 pounds of copper with a value of more than \$10 million— a substantial output in the context of the limited state production data available. Production at the mine ceased at the time the Fontana Dam was completed in 1944.¹⁵⁶ The resulting Fontana Lake flooded the standard and narrow-gauge railroad and nearby highway that provided access to the mine. Cities Services Realty Corporation, which acquired the mine at an unknown date from the North Carolina Exploration Company, retained title to the mine as a park in-holding until 1983, when the NPS purchased the property.¹⁵⁷

The Fontana Mine orebody was a single vein having a strike of about north 45-60 degrees east and a dip of approximately 40 degrees to the southeast. The vein and neighboring mineralized zones varied in width from a few inches to as much as 40 feet, though much of the mine’s development followed an ore body less than 12 feet in width. The mine’s workings were substantially larger than those of the Adams Copper Mine. Ore was taken from the mine about 3,000 feet down the dip.¹⁵⁸ As of 1942, the mine extended down 20 levels, or about 1,700 vertical feet.¹⁵⁹ The highest point of the mine was an air shaft at 1,941 feet above sea level. The mine was accessed via an adit at 1,801 above sea level (Level 1), where a skip was provided for miners and materials. Level 1 also contained a blacksmith shop, steel sharpening shop, and other service facilities.¹⁶⁰

Fontana’s ore was sufficiently rich not to require beneficiation prior to shipment, excepting a small amount of hand sorting and select mining.¹⁶¹ The surface works established for the mine consisted of two groupings of buildings and structures. At the mine head on what is now the Mine Branch of Eagle Creek were the hoist headframe, tibble, engine, and steam boiler; a narrow-gauge railway incline; and three or more wood frame equipment sheds for a compressor, carbide lamp supplies, and a machine shop. South of the mine head at the confluence of Mine Branch and Ecoah Branch was the mine’s administrative and residential complex. This camp-like grouping included about eight to twelve buildings of mostly wood frame construction. These included staff housing and bunkhouses; a combined post office, drilling core shed, and barber shop; a steam plant for the incline; and a school and/or church. As noted above, the ore was smelted elsewhere. A mine-owned

¹⁵⁶ Emmons, “Report on the Fontana Mine,” 1-3; W.H. Emmons “A Valuation of the Fontana Mine” (typescript, March 15, 1943, Mineral Commodity Files, Division of Energy, Mineral, and Land Resources, North Carolina Geological Survey). Fox, Van Horn, and Barnett, *Geology and Ore Deposits*; Stuckey, *North Carolina*, 284-285.

¹⁵⁷ The mine’s profitability is not known, but was assumed by geologists evaluating the mine at the time of its operation to be substantial given the grade of ore. Emmons, “A valuation of the Fontana Mine,” 51; Espenshade, “Geology of Some Copper Deposits” 27-30; Holland, *Fontana*, 57; Clarence S. Ross, “Origin of the Copper Deposits of the Ducktown Type in the Southern Appalachian Region.” Geological Survey Professional Paper 179, (Washington, DC: US Government Printing Office, 1935), 92.

¹⁵⁸ Rankin and Hunter, “North Carolina Copper Deposits.”

¹⁵⁹ Emmons, “Report on the Fontana Mine.”

¹⁶⁰ Emmons, “Report on the Fontana Mine,” 12. Espenshade, “Geology of Some Copper Deposits,” 27-30. A skip is a large metal bucket drawn by a hoist and used in vertical or inclined shafts.

¹⁶¹ Transportation costs only warranted removal of the high-grade ore (containing more than 5 percent copper). The marginal mineralized material adjacent to the ore body was left in the mine. Emmons, “Report on the Fontana Mine”; Rankin and Hunter, “North Carolina Copper Deposits.”

narrow-gauge railway about 3.5 miles in length connected the mine to the former Carolina and Tennessee Southern Railway at Fontana, North Carolina, where an ore dump was located.¹⁶²

Minor Copper Prospects within Great Smoky Mountains National Park. The Westfeldt Mine (a.k.a., Westfeldt Prospect) was sited about 0.5 mile northwest of the Adams Copper Mine on a small tributary to Haw Gap Branch, a tributary of Hazel Creek in Swain County, North Carolina. There is little information concerning its historical development, but the prospect was established about 1900, possibly by Walter S. Adams and his North Carolina Mining Company. Between 1900 and c. 1910, miners dug five adits and two shafts along 600 feet of stream bank. The main shaft reached a depth of approximately 100 feet. By the 1940s, the site consisted of a few pieces of abandoned mine equipment, an old shaft filled with water, and a dump of about 200 yards of waste rock.¹⁶³

At unknown dates in the early twentieth century, G.I. Calhoun of Proctor made several prospecting forays within the future bounds of the national park in North Carolina. He established the Calhoun Prospect in the Bone Valley Creek drainage upstream of Hazel Creek. Explorations consisted of a 20-foot long trench and side excavations. Calhoun also made explorations on the crest of Silers Bald and at Locust Gap near Walker Creek, but no significant excavations occurred at either location.¹⁶⁴

Iron Mining in Blount and Sevier Counties, Tennessee, ca. 1820–ca. 1900

Blount and Sevier counties fall within the so-called Eastern Iron Belt in Tennessee, a limonite, hematite, and magnetite iron ore-producing district extending along the Tennessee/North Carolina border at the foot of the Unaka Mountains. The deposits were primarily limonite, which is the product of weathering (oxidation and hydration) of iron-rich rocks or minerals and the re-deposition of the resulting iron oxide as brown or yellowish earthy concretions. Historically, the Eastern Iron Belt was recognized as having the largest, if not the richest ore deposits in the state and the deposits of Blount County were known for their purity. Within the study period, iron manufacturers identified and exploited limonite deposits throughout the Eastern Iron Belt and smelted them in blast furnaces and bloomery forges. The coves and other low-lying areas of Blount and Sevier counties within and near what would become the national park were host to several extraction and bloomery forge sites, although direct linkages between specific extraction and smelting sites have not been established.¹⁶⁵

Prior to the Civil War, economic circumstances and limited transportation facilities dictated that limonite mining and iron production in these regions were co-located to some degree. However, markets for iron were both local and regional in nature. The first iron-smelting facilities were established in East Tennessee in Hawkins and Sullivan counties in about 1790 and 1811, respectively, and exploitation of iron resources in the southern counties of East Tennessee followed in the 1820s and 1830s after the Cherokee Indians ceded these territories. Frontier ironworks of the 1790s and early 1800s produced a variety of goods. Blast furnaces cast pig iron as a bulk commodity and also consumer goods such as hollowware (kettles, pots, and pans), stoves, and firebacks. Bloomery forges primarily produced malleable wrought iron, or bar iron, that was sold as a bulk commodity. Smiths or machinists could work the bar iron into numerous items including nails, horseshoes, hinges, wagon tires, and axe heads. As of 1854, there were about 9 blast furnaces and 39 forges in the counties of the Eastern Iron Belt, which by this time was one of the most productive iron-making

¹⁶² This railway was constructed by the Montvale Lumber Company and was included in the 1928 sale of the mine. Emmons, "Report on the Fontana Mine," 12; Holland, Fontana, 50-53; Livingston, "The Copper Mine at Eagle Creek."

¹⁶³ Espenshade, "Geology of Some Copper Deposits" 35; Fox, Van Horn, and Barnett. *Geology and Ore Deposits*, 10-12.

¹⁶⁴ Espenshade, "Geology of Some Copper Deposits," 36.

¹⁶⁵ According to state geologic surveys, there were historically no iron ore resources or ironworks within the counties making up the North Carolina side of the park. J. B. Killebrew, *Iron and Coal of Tennessee* (Nashville, TN: Printers to the State, 1881), 5-7; Southworth et al. *Geologic Map of the Great Smoky Mountains National Park*, 39; Stuckey, North Carolina, 310-319.

areas in the southern Appalachians. Production in this region helped Tennessee become a modest producer of iron in the national context in the antebellum period. In 1840, Tennessee ranked third highest in bar iron production (9,673 tons of 197,233 tons nationally) and sixth-highest in cast iron production (16,129 tons of 286,906 tons produced nationally).¹⁶⁶

Iron works suffered significantly during the Civil War. By 1880, the number of bloomery hearths and forges in East Tennessee was reduced to perhaps 20. As had been the case before the War, these were small to medium-sized bloomery hearths and forges that each produced about 10 to 100 tons of merchant bar iron. The War was one of several setbacks and disadvantages that would contribute to the demise of the industry by ca. 1900. The inefficient transportation infrastructure was a competitive disadvantage, especially as markets nationalized after the Civil War. After the mid-century, there was a surplus in the iron market and prices fell, making the mountain forges even less competitive. The Eastern Iron Belt's ores were also less rich than other parts of the state. Establishment of railroads to richer ore beds in the late nineteenth century would allow their shipment to established industrial centers such as Chattanooga, where coal or coke was more readily available and iron manufacture could be pursued at a larger scale for regional and national markets. Thereafter, the number of iron furnaces in the Eastern Belt was substantially diminished.¹⁶⁷

Fuel for blast furnaces and bloomery forges throughout the study period was primarily charcoal derived from local forests. Colliers would cut and stack wood, cover it with earth, and then burn it in the resulting oxygen-deficient environment. The smelters required substantial amounts of charcoal. Large forested tracts were reserved for charcoal production and deforestation was a significant environmental effect of the industry. Charcoal production was completed by colliers, who would establish short-term camps at production sites. Iron production required skilled workers (forge masters) to operate blast furnaces and forges and a larger unskilled labor pool. In the antebellum period, a substantial portion of the labor pool consisted of slaves.¹⁶⁸

Geologic surveys identified limonite pits or mines at several locations within Blount and Sevier counties. Limonite extraction activities occurred within the park at Cades Cove and to the north of the park at Tuckaleechee, Miller, and Wears coves.¹⁶⁹ Unfortunately, the temporal periods of such activities are not provided in the literature. Multiple forging operations occurred during the early- and mid- nineteenth century in Blount and Sevier counties, presumably using the limonite from the above locations. At least two unnamed iron works were active in Blount County during 1820, as reported in the census of that year. Miller's Cove hosted Blount County's largest ironworks, the Amerine Forge. George Amerine ran this furnace on Hess's Creek from 1845 until the Civil War. He produced bar iron and was noted for having produced 15 tons of this product in 1856. According to secondary sources, "a few slag heaps from this mining operation remain visible."¹⁷⁰ Other short-lived operations included ironworks in Tuckaleechee Cove and the Shields Bloomery Forge. The former

¹⁶⁶ R. Bruce Council and Nick Honerkamp, *Industry and Technology in Antebellum Tennessee: The Archaeology of Bluff Furnace* (Knoxville, TN: University of Tennessee Press, 1992), 46-47; Davis, *Where There Are Mountains*, 149-153; Robert B. Gordon, *American Iron 1607-1900* (Baltimore, MD: Johns Hopkins University Press, 1996), 82-85, Appendix B; Killebrew, *Iron and Coal of Tennessee*, 14-41; James M. Safford, *Geology of Tennessee* (Nashville, TN: S.C. Mercer, Printer to the State, 1869), 455.

¹⁶⁷ Council and Honerkamp, *Industry and Technology in Antebellum Tennessee: The Archaeology of Bluff Furnace*, 46-47; Davis, *Where There Are Mountains*, 149-153; Gordon, *American Iron 1607-1900* (Baltimore, MD: Johns Hopkins University Press, 1996), 84-85; Killebrew, *Iron and Coal of Tennessee*, 14-41; Safford, *Geology of Tennessee*, 455.

¹⁶⁸ Council and Honerkamp, *Industry and Technology*, 46-47; Davis, *Where There Are Mountains*, 149-151; Gordon, *American Iron 1607-1900*, 82-82, Appendix B; Killebrew, *Iron and Coal of Tennessee*, 14-41; Safford, *Geology of Tennessee*, 455.

¹⁶⁹ Robert B. Neuman and Willis H. Nelson, "Geology of the Western Great Smoky Mountains Tennessee" Geological Survey Professional Paper 349-D (Washington, DC: US Government Printing Office, 1965), 32, 73.

¹⁷⁰ Since slag is a by-product of smelting, not mining, it is not clear whether this statement references the mine works or the forge. Burns, *History of Blount County*, 244-245; Thomason, *Multiple Property Documentation Form: The Historic and Architectural Resources of Blount County, Tennessee*.

operated for only a few years in the 1830s before it was destroyed in a flood. The latter was located on the Little River at Sunshine until it was destroyed in a flood in 1850.¹⁷¹

Bloomery forge operations occurred at two locations within the park: the Cades Cove Forge and the Abram's Creek Forge, both in Blount County. In Cades Cove, Thomas and William Tipton, who were experienced iron workers, established an "iron works" on Forge Creek at an unknown date prior to 1821, making it one of the earlier such operations in the Blount County.¹⁷² Deed records for Cades Cove from the 1820s contain numerous references to "forge tracts" for either minerals or timberland for charcoal production. The Tiptons sold the forge to Robert Shields in 1834, but it is not known whether Shields operated the forge while it was under his ownership. In 1837, Daniel D. Foute acquired the forge, which came to be known as the Cades Cove Bloomery Forge. Foute operated the forge until ca. 1847, when it was reported to be abandoned. By 1859, the forge was reported to have almost disappeared. Mid-twentieth-century geological surveys of Cades Cove identified overgrown pits and waste piles in a limonite deposit at an unspecified location in the southwest part of the cove, while county histories state that the ore source was removed one mile to the northeast of the forge. These two accounts may refer to a single ore mine.

In 1827, James Carson established Carson's Iron Works on Abram's Creek near Happy Valley, just north of Pine Mountain. Foute acquired these works at an unknown date and operated them as the Abram's Creek Forge until 1847. Daniel Foute was an important figure in the mid-nineteenth century development of Cades Cove. In addition to the forges, he operated a resort hotel at Montvale Springs between 1843 and 1850 and instigated or sponsored several road-building projects. It is not known whether he had direct experience with iron forging or whether he employed a forge master.¹⁷³

Other Mining and Quarrying Activities

Stone quarrying and mineral salt mining were lesser-known and relatively minor extractive industries in Great Smoky Mountains NP. Longarm Quartzite is a medium-grained metasedimentary rock within the Snowbird Group that is good for dimension building stone. It was quarried within the park just northeast of Ravensford, Swain County, North Carolina, at a location between the present-day Blue Ridge Parkway and the Oconaluftee River. This stone was used during the 1930s for the construction of the Park Service Headquarters at Gatlinburg, the Oconaluftee Ranger Station, and other park structures. No information could be found on the name of this quarry or when it was opened. Superintendent reports also provide anecdotal evidence of additional project-specific NPS quarrying for building stone during the 1930s at the "old quarry site" near Sugarlands Headquarters Area and the Old Sugarlands Trail, along the Newfound Gap and Clingmans Dome roads rights-of-way, and in the Smokemont vicinity. No information concerning the age of the "old quarry" at Sugarlands could be located. These construction quarries may now be obscured by the roads or other landscaped areas.¹⁷⁴

¹⁷¹ Elizabeth Cahill, "The Cades Cove Bloomery Forge" (Draft Master's Thesis: The University of Tennessee, 2007). Thomason, Multiple Property Documentation Form: The Historic and Architectural Resources of Blount County, Tennessee.

¹⁷² This date and the date of Foute's acquisition of the forge were established through primary source research by master's candidate Elizabeth Cahill. These dates revise Durwood Dunn's earlier account of the history of the forge. Cahill, "The Cades Cove Bloomery Forge;" Dunn, Cades Cove.

¹⁷³ Foute also owned slaves of an unknown number, but there is no evidence suggesting that he used these slaves at his forge or mining location. Banker, *Appalachians All*, 62; Burns, *History of Blount County*, 244-245; Dunn, Cades Cove, 82-85; Neuman and Nelson, "Geology of the Western Great Smoky Mountains National Park," 32, 73.

¹⁷⁴ Branch of Engineering, "Ravensford Tract and Vicinity, Drawing No. 5387" (Gatlinburg, TN: National Park Service, April 15, 1940); Dianne Flaugh, Cultural Resources Manager, email communication, January 29, 2014; James A. Jacobs, "Great Smoky Mountains National Park, Administration Building," HABS No. TN-256 (Washington, DC: National Park Service, draft dated 2012); Hadley and Goldsmith, "Geology of the Eastern Great Smoky Mountains," 73; Southworth et al. *Geologic Map of the Great Smoky Mountains National Park*, 12; Superintendent's Monthly Reports, March 1934, 10; April 1936, 3-4; May 1937, 4; October 1938, 6; December 1938, 12.

In the late nineteenth century, quarry operators established an industry extracting slate of the so-called “Pigeon” formation of East Tennessee at multiple points along the Little Tennessee River in Blount County, Tennessee. Slates of the Pigeon formation are grey-blue, blue, or purple in color; of a fine, even grain that easily split; and were found to be suitable for roofing and electrical devices. Within future lands of the Great Smoky Mountains NP, perhaps 3–5 slate quarries or operations were opened on Abrams Creek’s Panther Creek tributary, about 2 miles east of Chilhowee Dam. The Chattanooga Slate Company established the first of these (which were also the first commercial slate quarries in East Tennessee) when the company opened three quarries in 1895 to obtain roofing slates. The slates were brought down the creek valley on a former logging railroad or cable tram (records are unclear concerning the exact nature of the transportation infrastructure) to the Little Tennessee River, where they were shipped out by boat. Most of these slates were sold in Chattanooga, with a lesser quantity sold in Maryville, Tennessee. In 1903, Tennessee Slate Company was forced to sell its Panther Creek quarries by court action, apparently due to financial hardship brought about by the quarries’ limited rail access and a stockholder lawsuit. Around 1932, J. T. Roberts, who had experience operating slate quarries in Georgia and Vermont, engaged in further prospecting on Panther Creek and may have opened a fourth and fifth quarry in the watershed. Currently, there are some remains of the cable tram and rail system remaining in the Panther Creek watershed within the park boundaries.¹⁷⁵

Alum Cave on the slopes of Mt. Le Conte in Sevier County, Tennessee contains “blooms” of sulfate salts produced by the weathering of pyrite-rich shale. Prior to the Civil War, small-scale exploitation of these deposits occurred for the manufacture of “alum” hair salts, Epsom salt (a sulfate of magnesia), copperas, and saltpeter. In 1838, Ephraim Mingus, Robert Collins, and George Hays of North Carolina formed the Epsom Salts Manufacturing Company and bought Alum Cave. They constructed a camp at the base of the bluff and built hoppers and vats for processing the salts, which were brought to market on Knoxville on horseback. In 1854, finding that the mine was too remote to be worked profitably, Mingus, Collins, and Hays sold the cave to some East Tennessee investors. Saltpeter was a critical ingredient of gunpowder and this cave, along with many others of the region, was the subject of intense interest on the part of the Union and Confederate armies during the Civil War. A Confederate force was stationed at Gatlinburg to protect the Alum Cave supply. In December 1863, two companies of Union soldiers evicted these troops and gained control of the mine in the Battle of Gatlinburg. Additional attempts to mine Alum Cave were made by unknown parties in the immediate Post-bellum period, but these also failed because of the mine’s remote location. There are no known cultural resources affiliated with this activity.¹⁷⁶

Known Resource Types

By their nature, modern-period extractive industries occurred in short-lived campaigns whose implementation and duration were predicated on a complex economic and technological calculus or on the removal of the entirety of the natural resource within a given geographic locus. The facilities associated with these activities were therefore highly transient, and often ephemeral. Buildings and

¹⁷⁵ The Pigeon formation’s name is derived from its proximity to the Little Pigeon River in Sevier County, Tennessee. The quarries are supposed to have operated until about 1940, although who operated them after the demise of the Tennessee Slate Company is unclear. No slate quarries within the park were visited for the preparation of the current HRS, as there are no intact buildings or structures that required evaluation under the HRS methodology. H.C. Amick, “Slates of East Tennessee,” *Economic Geology* 34 (1939), 455–457; F.M. Grace, “Slates in East Tennessee,” *Stone* 9 (October 1894), 434–435; T. Poole Maynard, “The Pigeon Slates of Tennessee,” *Stone* 34 (1913), 82; Stone, “The Slate Trade,” *Stone* 26 (October 1903), n.p.; WBIR-TV 10, Knoxville, “Slate Quarries of Panther Creek” (video on website, <http://www.wbir.com/video/1777188099001/1/Slate-Quarries-of-Panther-Creek->, 2015).

¹⁷⁶ Joseph C. Douglas, “Miners and Moonshiners: Historic Industrial Uses of Tennessee Caves” *Midcontinental Journal of Archaeology* 26 (Fall 2001), 253; Edwin J. Foscue, “Gatlinburg: A Mountain Community” *Economic Geography* 21 (July 1945), 197; Hammerstrom et al. “Weathering of Sulfidic Shale and Copper Mine Waste: Secondary Minerals and Metal Cycling in Great Smoky Mountains National Park, Tennessee, and North Carolina, USA” *Environmental Geology* 45 (2003), 39; Pierce, *The Great Smokies*, 16–17. Southworth et al., *Geologic Map of the Great Smoky Mountains National Park*, 27.

structures not requiring substantial construction from an engineering perspective were erected with cost-effective materials and techniques and were abandoned or reused elsewhere at the cessation of the campaign. Likewise, equipment was moved to new locations whenever possible, or was abandoned in situ and thereafter typically subject to salvage efforts. In the instance of logging activities within the future park, the survival rate of associated property types was further limited by the NPS policy of wholesale removal.

Identified resources in Great Smoky Mountains NP that are directly associated with extractive industry include five structures (two bridges, two machinery houses, one dam and artificial pond basin); two objects (one hoist and one tank); multiple identified and unidentified structural ruins (sites, including the ruins of a drying kiln), and multiple landscape features (retaining walls, mine adits, railroad grades). In some instances, these resources are found in isolation. Most, however, are in historically affiliated groupings that are remnants of larger camps and extractive or processing systems. These groupings are now missing a substantial proportion of their original design and many of the ruins cannot be readily identified without a detailed site evaluation. Areas surrounding these visible remains may contain archeological deposits associated with the historical activities pursued at each location. The fragmentary and clustered nature of the resources indicates that they should be evaluated as historic districts within an industrial-archeological framework that takes into account the visible landscape features and also the information potential of the resources. These archaeological resources should be identified and evaluated according to the NPS *National Register Bulletin 36: Guidelines for Evaluating and Registering Archeological Properties*. Additionally, NPS *National Register Bulletin 42: Guidelines for Identifying, Evaluating, and Registering Historic Mining Properties* should be used for identification and evaluation of mining sites. If evaluated for National Register eligibility individually, resources such as residences, bridges and sheds, excepting outstanding examples of a particular property type, are unlikely to convey their associations with the historical industries that they supported.

The National Register eligibility of bridges is addressed in the settlement and engineering contexts of Chapter One. The “set-off” cabins remaining at Daisy Town, Elkmont, were joined into larger vacation homes and, thus, no longer retain integrity within the logging context. Their National Register eligibility within the recreation and tourism context is discussed in Chapter Four.

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CHAPTER FOUR: RECREATION AND TOURISM IN THE GREAT SMOKY MOUNTAINS, 1900–1942

The mountainous sections of Western North Carolina and East Tennessee have been a magnet for visitors since the early nineteenth century. The moderate climate, breathtaking scenery, and many recreational opportunities of the area were at first known only to a few. As wealth and leisure became more widely distributed and the railroad and the automobile brought increased mobility, annual visits to these mountains increased from the hundreds to the millions. The coming of Great Smoky Mountains NP and its program of road building greatly facilitated recreational use of the mountains.

Planters from the Carolina low country seeking to avoid the heat and disease of the summer season were the first to discover the resort possibilities of the North Carolina mountains. In 1827, the completion of the Buncombe Turnpike from Greenville, South Carolina, to Greenville, Tennessee, opened Western North Carolina to the coastal elite. Within fifteen years, Flat Rock, the Cashiers Valley, Asheville, and Warm Springs near the Tennessee/North Carolina border were established summer resorts. Wealthy families bought large tracts and created estates with spacious houses and elaborately landscaped grounds. Wade Hampton's High Hampton property at Cashiers and Christopher C. Memminger's Rock Hill at Flat Rock were examples of notable estates.¹⁷⁷ People of more modest means stayed at inns or hotels, such as the Farmers Inn at Flat Rock. Traveling by private carriage or stagecoach, the low-country families arrived with their retinues of slaves in May and returned to their coastal properties in October or November.¹⁷⁸

Many summer visitors sought the health-giving waters of the numerous mountain springs. In 1831, James Patton opened an inn at Warm Springs, on the French Broad River thirty-five miles by carriage northwest of Asheville, just a few miles shy of the Tennessee line. Warm Springs, later renamed Hot Springs, rapidly became a popular summer destination for Carolina and Tennessee families. In 1832, Daniel D. Foute opened a log hotel in Blount County, Tennessee, at Montvale Springs near Chilhowee Mountain, just outside the current northwest park boundary. In the 1850s, a subsequent owner built a three-story frame hotel and approximately fifty cottages to accommodate a steady flow of summer visitors, mostly from Georgia, Tennessee, and Alabama. The mountain resorts thrived until the Civil War, and many were able to resume operations after hostilities ended. Smaller resorts developed in the 1870s at Mount Nebo Springs in Miller Cove and at Kinzel Springs in Tuckaleechee Cove, both in Blount County.¹⁷⁹

The construction of a rail line from Knoxville to Maryville, Tennessee, in 1868 and the extension of the Western North Carolina Railroad to Asheville in 1880 made the mountain hotels and resorts accessible to many more visitors. The resort hotels offered dining and dancing, billiards, nine pins, walks on landscaped grounds, and carriage and horseback excursions to nearby scenic spots. Because of poor roads and trails, only the most adventurous visitors, often hunters and fishermen, ventured into the Smokies themselves. No inns existed in the more remote regions, so hikers and

¹⁷⁷ In 1945, poet and Lincoln biographer Carl Sandburg purchased Rock Hill, then known as Connemara. After Sandburg's death, the NPS opened the property to the public as Carl Sandburg Home National Historic Site in 1974.

¹⁷⁸ Lawrence Fay Brewster, *Summer Migrations and Resorts of Low-Country Planters* (1947; Reprint, New York, NY: AMS Press, 1970), 7–9, 63–70, 86; Ora Blackmun, *Western North Carolina: Its Mountains and Its People to 1880* (Boone, NC: Appalachian Consortium Press, 1977), 202–3, 289–95.

¹⁷⁹ Blackmun, *Western North Carolina*, 294–95; Burns, *History of Blount County*, 79–91.

sportsmen had to either carry a tent and provisions or seek accommodations at cabins along the way.¹⁸⁰

An 1883 guidebook titled *The Heart of the Alleghanies or Western North Carolina* provides a revealing glimpse of conditions for travelers in the Great Smokies before the automobile age. The authors, Wilbur Zeigler and Ben Grosscup, describe the resort hotels at Asheville and the major springs and several mountain fishing and hunting excursions, two of them into areas later incorporated into the national park. An important feature of the book is the provision of names of cabin owners who were willing to feed and lodge visitors. The authors describe a June 1879 fishing trip in the Cataloochee Creek watershed and recommend staying at Mr. Palmer's roomy house. Among the trout streams they tout are the Oconaluftee and Forney, Hazel, and Eagle creeks, all now wholly or partially within park boundaries. During a deer hunt up Eagle Creek, the authors' party encountered no dwelling for the first ten miles. Finally, the hunters stopped at the double cabin of brothers Jake and Quil Rose. Zeigler and Grosscup advise no one to venture into the Smoky Mountain fastnesses without a good guide.¹⁸¹

ELKMONT (SEVIER COUNTY, TN)

The extensive operations of the Little River Lumber Company (described in Chapter Three) led to the development of Elkmont, Tennessee, as a resort community. In 1907 and 1908, the company ran a standard gauge rail line up the East Prong of Little River and established a lumbering town at Elkmont, which served as headquarters for operations in the East Prong watershed. The company railroad's connection with the Knoxville and Augusta line at Walland allowed daily passenger service between Knoxville and Elkmont to begin in 1909. Eager to get some return on its cut-over lands, in 1910 the Little River Lumber Company sold fifty acres along Jakes Creek just upstream from the town of Elkmont to the Appalachian Club. The company also leased exclusive hunting and fishing rights on 40,000 acres to the club. The club, whose members were mostly Knoxville businessmen, built a clubhouse/hotel and allowed members to construct their own cottages. The Appalachian Club eventually comprised the clubhouse/hotel and about fifty-five cottages in three distinct communities: "Daisy Town," lining both sides of the road south of the clubhouse to its intersection with Jakes Creek Road; "Society Hill," farther south along Jakes Creek Trail leading up the mountain; and "Millionaires' Row," to the east along the Little River. The original clubhouse burned in the early 1930s; the present clubhouse dates to 1934.¹⁸²

In 1912, the Wonderland Park Company constructed the Wonderland Hotel on sixty-five acres just south of Elkmont that were also purchased from the Little River Lumber Company (figure 4.1). Owned by three Knoxville brothers, John P., Charles, and T. M. Carter, the Wonderland Park Company aimed to make quick profits by selling off hundreds of small lots to would-be builders of vacation homes. Disputes among the brothers caused them to sell their holdings in 1913 to a group of Knoxville businessmen who turned Wonderland into a resort similar to the Appalachian Club operation. Club members built a hotel annex in 1920 and constructed about twenty detached cottages.¹⁸³

¹⁸⁰ John J. Van Noppen and Ina Woestemeyer, *Western North Carolina Since the Civil War* (Boone, NC: Appalachian Consortium Press, 1973), 253–54; Burns, 235.

¹⁸¹ Wilbur G. Zeigler and Ben S. Grosscup, *The Heart of the Alleghanies or Western North Carolina* (Raleigh, NC: Alfred Williams and Co., 1883), 124–29, 145–53.

¹⁸² Thomason and Associates, *The History and Architecture of the Elkmont Community*, Report Prepared for the NPS, Southeast Region (Nashville: Thomason and Associates, 1993), 8–10; John Ogden Morrell, "A Brief History of the Appalachian and Wonderland Clubs within the Great Smoky Mountains National Park" (typescript, 1976, Great Smoky Mountains NP, Gatlinburg, TN), 1–2.

¹⁸³ Thomason and Associates, *The History and Architecture of the Elkmont Community*, 11–15; Morrell, 2–3.



Figure 4.1. Wonderland Hotel at Elkmont, Tennessee, 1921 (Courtesy of Thompson Photograph Collection, McClung Historical Collection, Knox County Public Library).

The well-to-do summer residents of the two clubs at Elkmont enjoyed swimming, hiking, picnicking, horseback riding, fishing, and games like croquet, badminton, and horseshoes. Bands from Knoxville provided music for dancing on Saturday nights. Both clubs rented rooms in their clubhouse/hotels to the general public when demand from members was slack. Individual cabin owners also were free to rent out their quarters, giving the two clubs a semi-public character. By the time the Little River Lumber Company discontinued train service and removed its tracks to Elkmont in 1925, many club members were driving most of the way to Elkmont, either along a rough gravel road from Gatlinburg that ran along Fighting Creek or via a road through Maryville to Townsend. Following the removal of the railroad tracks, the roadbed from Townsend to Elkmont was converted to a motor road.¹⁸⁴

The well-connected members of the Appalachian and Wonderland clubs received special treatment when Great Smoky Mountains NP was created. Those who didn't wish to sell outright were awarded half the appraised value of their cabins and granted lifetime leases. The final leases expired in 2001, and most of the buildings have remained vacant since then. The majority of the Wonderland Hotel collapsed in August 2005 because of a failed structural system, and the NPS removed the ruins of the building in late 2006. The park reached a decision for the future management of Elkmont in 2009 after a lengthy planning process. Between 2010 and 2012, it restored the exteriors and rehabilitated the interiors of the Appalachian Clubhouse and the Spence Cabin for public rental and day use and constructed two new parking lots and a comfort station in the Daisy Town area. The management plan for Elkmont also includes the exterior restoration of seventeen of the remaining Appalachian Club cabins and the removal of the 1920 Wonderland Hotel Annex, twenty-six contributing cabins,

¹⁸⁴ Thomason and Associates, *The History and Architecture of the Elkmont Community*, 15–18; Vic Weals, *Last Train to Elkmont: A Look Back on Life on Little River in the Great Smoky Mountains* (Knoxville, TN: Olden Press, 1991), 85–86.

and three contributing garages.¹⁸⁵ (See Chapter Seven for a discussion of the Mission 66 campground constructed by the NPS between the Appalachian Club and Wonderland Hotel areas at Elkmont.)

AUTOMOBILES AND THE ROAD-BUILDING LOBBY

Burgeoning automobile ownership in America in the 1920s and the concomitant pressure for the construction of good roads dramatically changed recreational patterns in the Great Smokies and elsewhere. Unlike railroads, which usually brought people to fixed resort locations like Elkmont or the various springs, automobiles allowed visitors to ramble more widely, on their own timetables, carrying their fishing and camping gear and provisions with them. Automobile registrations nationwide jumped from 458,000 in 1910 to eight million in 1920 and twenty-three million in 1930. As auto ownership became available to broad sections of the public, motorists and the industries tied to the automobile (petroleum, tires, asphalt, and cement) organized to demand better roads. Increasing auto ownership, lobbying for better roads, and the promoting recreational areas were firmly linked in the 1920s and after. Typical of this convergence of interests was the central role of the Knoxville Automobile Club in the successful effort to establish Great Smoky Mountains NP, described more fully in Chapter Five.¹⁸⁶

Road building efforts in the 1920s greatly improved access to the Great Smokies. In 1922, it took four hours to drive from Knoxville to Sevierville; by 1925, a new macadamized road put Gatlinburg within one-and-one-half hours of Knoxville. The first motor road over the Smokies opened in 1932, connecting Gatlinburg and Cherokee via Newfound Gap. Later improved substantially by the NPS (see Chapter Five), this road was critical in opening the Smokies to tourism on a massive scale. By the late 1920s, Rich Mountain Road, a passable hard-surface road from Tuckaleechee Cove over Rich Mountain into Cades Cove, increased tourist interest enough for several Cades Cove families to offer accommodations to travelers. Among these were establishments maintained by Walter Whitehead and John Oliver, neither of which still stands.¹⁸⁷

The creation of Great Smoky Mountains NP at almost the same time that reliable all-weather roads reached the Smokies meant that few resort hotels were constructed before the government acquired the land for the park. In 1925, brothers Ray and Oscar Bohannon and their brother-in-law Lillard Maples opened the Indian Gap Hotel, a small facility on the West Prong of the Little Pigeon River, just downstream from the present-day site of the Chimneys picnic area. Most guests arrived on horseback from Gatlinburg via the unimproved road through the Sugarlands, although a rugged Model A Ford or truck could have made the trip. Old photographs show a two-story wooden structure with full-facade verandas on both floors. A water-powered generator provided electric lights in the hotel. The Indian Gap Hotel operated for just eight years, then was purchased by the NPS in 1930 and demolished in 1933.¹⁸⁸ The hotel at Smokemont, although primarily serving

¹⁸⁵ Thomason and Associates, *The History and Architecture of the Elkmont Community*, 15–20, 22–27; National Park Service, *Elkmont Historic District: Final Environmental Impact Statement and General Management Plan Amendment* (Washington, DC: National Park Service, 2009), v–xviii, 5; National Park Service, “Memorandum of Agreement Re: Elkmont Historic District Environmental Impact Statement and General Management Plan Amendment Great Smoky Mountains National Park,” on file, Great Smoky Mountains National Park, 2009; National Park Service, “Record of Decision: Final Environmental Impact Statement/General Management Plan Amendment, Elkmont Historic District, Great Smoky Mountains National Park, Tennessee/North Carolina,” on file, Great Smoky Mountains National Park, June 30, 2009.

¹⁸⁶ John A. Jakle, *The Tourist: Travel in Twentieth-Century North America* (Lincoln, NE: University of Nebraska Press, 1985), 103–4, 110–11, 120–27. For a more detailed consideration of the convergent interests of park promoters and the movement for better roads in the Great Smokies, see the Historic American Engineering Record report, “Hold Up That Road; Let Your Uncle Sam Build It.”

¹⁸⁷ Leland R. Johnson, *Memphis to Bristol: A Half Century of Highway Construction* (Nashville, TN: Tennessee Road Builders Association, 1978), 38; Mason, *The Lure of the Great Smokies*, 7, 297–301; Dunn, *Cades Cove*, 242.

¹⁸⁸ “Indian Gap Hotel” file in Great Smoky Mountains NP Library.

employees and customers of Champion Fibre, also sheltered a few adventurous tourists. Had Great Smoky Mountains NP not been created, many hotels, lodges, and motels would have sprung up in the mountain valleys. As it is, motels, inns, and lodges have proliferated in Gatlinburg and Cherokee, the two main gateway communities for the park.

CATALOOCHEE (HAYWOOD COUNTY, NC)

Several families with property bordering on Cataloochee Creek, known for its trout fishing, provided accommodations, meals, and stocked streams to attract tourists to the Cataloochee Valley. Between 1917 and 1924, Jarvis Palmer (1882–1946) built three basic tourist cabins or bunkhouses that he rented to visitors from April through September. Palmer charged fifty cents a day for fishing, fifty cents a night for a bunk, and fifty cents more for three meals a day prepared and served by his family. He added a new kitchen wing to his house in the early 1920s to accommodate guests. Furnishings in the tourist cabins consisted of iron beds, tables, benches, and cane-bottomed chairs. The Palmers ceased their tourist operation sometime in the 1930s and moved out of the valley in 1938. One board-and-batten cabin survives on the old Palmer property.¹⁸⁹ Beginning in the early 1920s, W. M. Hall built eight tourist cabins and hand-dug a three-acre lake with two nearby fish rearing ponds on his land. He charged visitors for lodging, fishing and swimming privileges, and boat rentals. From 1933 to 1937, Thomas Alexander leased the former W. M. Hall parcel and offered accommodations and horseback riding on what he called Cataloochee Ranch, with visitors using the lake primarily for swimming. Following the Alexanders' departure, the buildings were removed and the lake drained via two breaks in the earthen wall. Landscape features and ruins—including the lake walls, dam, and jetty and the rock-lined fish rearing ponds—are still evident on the property.¹⁹⁰

LE CONTE LODGE (SEVIER COUNTY, TN)

Still operating within the park is a unique mountain-top resort on Mt. Le Conte, established as a camp for hikers in the 1920s and gradually turned into a permanent complex thereafter. Members of the Great Smoky Mountains Conservation Association obtained permission from Champion Fibre Company to construct a camp on Mt. Le Conte in 1925. Association member and outdoorsman Paul Adams built the camp with the help of local residents Lavater Whaley and Ernest Ogle. After constructing tables, latrines, and lockers in the summer of 1925, Adams built a round-log cabin from nearby stands of spruce and balsam during the fall and winter. Long since demolished, the 15-by-20-foot cabin had four levels of bunks and was ready for use by the spring of 1926. Because supplies had to be brought in over five miles of trail, Adams fitted his dog, Cumberland Jack, with leather saddle bags. The dog made solo trips to the nearest store, carrying shopping lists from his owner and returning with up to twenty pounds of supplies.¹⁹¹

Jack Huff, son of Andy Huff, the owner of the Mountain View Hotel in Gatlinburg, took over operations of the camp on Mt. Le Conte in May 1926. After the establishment of the park, Huff constructed the Old Lodge/Cabin #1, which was in use by the late 1930s. Between 1933 and 1943, Huff built a number of single-room cabins, at least one multi-room cabin (the New Lodge/Cabin #2), and a Lodge/Dining Room (figure 4.2). Over the years, additions were placed on the Lodge/Dining Room and a number of support buildings (a laundry, a stable, and a woodshed) were constructed. Beginning in the 1960s, many of the original buildings were demolished and replaced with new buildings. The Huffs built a Recreation Building in stages during the summers of 1968 through 1974.

¹⁸⁹ Edward Trout, "Draft Historic Resource Study, Jarvis Palmer House" (typescript, n.d., Great Smoky Mountains NP, Gatlinburg, TN).

¹⁹⁰ Dianne L. Flaugh, *Cataloochee Historic District: Draft Cultural Landscape Report Draft* (Gatlinburg, TN: Great Smoky Mountains National Park, 2000), 27, 95–98.

¹⁹¹ Paul J. Adams, *Mt. Le Conte* (Knoxville, TN: Holston Printing Co., 1966), 5, 50–60.



Figure 4.2. Le Conte Lodge, 1936 (Photo #283, Herbert M. Webster Photograph Collection. University of Tennessee, Knoxville - Libraries).

When the New Lodge/Cabin #2 was rebuilt in the mid-1980s, only the roof assembly from the original building was retained. A new multi-room cabin (the East Lodge/Cabin #3) was constructed in the mid-1980s along with new Toilet Buildings for hikers and overnight guests. The Huff family operated Le Conte Lodge into the 1980s, when the concession was taken over by Wilderness Lodging, a subsidiary of Stokely Hospitality Enterprises, the current concessionaire.¹⁹²

Because of the impermanence of wooden building materials in the damp, exposed mountaintop environment, all of the buildings at Le Conte Lodge have been wholly or partially reconstructed over the years. Only the frames of the eight single-room cabins are original material; roofs, exterior siding, windows, and doors have been replaced as needed. At least one building has been moved. When horses no longer were maintained at Le Conte Lodge, the stable building was demolished, and the tack house moved and remodeled to serve as employee quarters.¹⁹³ Because of the small amount of surviving original material, the addition of numerous new buildings, the moving of buildings, and other changes, the Le Conte Lodge complex has little integrity.

SMOKY MOUNTAINS HIKING CLUB (SEVIER COUNTY, TN)

The Smoky Mountains Hiking Club (SMHC), a conservation and recreation group organized in 1924, was allowed to build a cabin for its members' use in the Greenbrier section of the park along Porters Creek. The hiking club, whose membership was concentrated in Knoxville and nearby areas of East Tennessee, promoted conservation in the Smokies and later assisted the NPS in measuring trails and verifying and assigning place names within the new park. Among the club's more

¹⁹² Tim Line, General Manager, Wilderness Lodging, telephone interview by Robert W. Blythe, November 30, 1995; Laura Thornborough, *The Great Smoky Mountains* (New York, NY: Thomas Y. Crowell, 1937; revised and enlarged edition, 1942), 126; "A Brief History of LeConte Lodge," (typescript, 2001, Great Smoky Mountains NP, Gatlinburg, TN), 2.

¹⁹³ Tim Line, telephone interview, November 30, 1995.

prominent members in the 1920s and 1930s were Harvey Broome, a founder of the Wilderness Society; Charles I. Barber, a noted Knoxville architect who later designed the Headquarters Building for the NPS (see Chapter Five); and Carlos C. Campbell, who was active in the Great Smoky Mountains Conservation Association and later wrote *Birth of a National Park in the Great Smoky Mountains* (1960).

After receiving permission from park authorities in 1934, Smoky Mountains Hiking Club members constructed a two-room cabin around an existing chimney on the Whaley-Messer homestead. Working when they could, the members completed the cabin over a three-year period (figures 4.3 and 4.4). They salvaged most building material from nearby hewn-log buildings that were being demolished and attempted to imitate a typical mountain log dwelling. The club used the cabin for overnight hikes until its Special Use Permit with the NPS ended in 1976.¹⁹⁴ Determined eligible for the National Register of Historic Places in 1988, the hiking club cabin represents the recreational use of the park lands by an organized group from the surrounding area.¹⁹⁵

VOORHEIS ESTATE (SEVIER COUNTY, TN)

In 1928, Louis E. Voorheis, a retired Cincinnati inventor and industrialist, purchased a 102-acre tract near Gatlinburg along Le Conte Creek at the foot of Mount Le Conte, an area called Twin Creeks for two branches of Le Conte Creek. Born in Portsmouth, Ohio, in 1874 or 1875, Voorheis amassed a fortune manufacturing carbonic gas and had been vice president of the American Tool Works Company. After commissioning houses for himself near Cincinnati and in Florida, he still wanted a mountain home and decided to build in the Smokies. Voorheis had a strong interest in mountain people and their craft traditions and made substantial donations to the Pi Beta Phi settlement school in Gatlinburg. Pi Beta Phi, the first national women's college sorority, had established its school in 1912, choosing Sevier County because of its lack of schools and its residents' need for vocational training.¹⁹⁶

Voorheis worked closely with his architect to create an estate very much in the tradition of rustic resort architecture. He kept and extensively remodeled at least two buildings from the Ogle-Oakley farmstead that had occupied the site (figure 4.5), converting an apple barn to a garage/stable and the Ogle-Oakley house to a guest house. Voorheis sited the main lodge, guest cabins, barns, and outbuildings to blend into the landscape and used minimally finished local materials: fieldstone, wood shingles, and peeled log porch members. One wall of the lodge is of fieldstone, while the others are sided with hand-split chestnut shingles. The guest cabins and barn are also shingle-sided. Voorheis hired local craftsmen whenever possible and devoted particular attention to the woodwork of the lodge interior, which featured balsam beams, cherry paneling, and oak floors. He used stonework extensively to channel the water from the many springs and the two branches of Le Conte Creek on his property. Workers built a stone springhouse at the site of a hillside spring above the lodge and a series of terraced pools to receive the runoff. Between the creek branches, Voorheis constructed a stone grotto with a fish pool, a fountain, and a series of four pools fed by underground pipes. A dry-laid fieldstone wall that apparently was part of the existing farmstead runs along one side of the entry drive to the estate.

¹⁹⁴ Tom Duncan, "The Story of the SMHC Cabin: A Talk Given at the SMHC Cabin Social, April 10, 1976" (typescript, 1976, Great Smoky Mountains NP, Gatlinburg, TN).

¹⁹⁵ Herbert L. Harper, Executive Director, Tennessee Historical Commission, to Carol Shull, Chief of Registration, NPS, June 8, 1988; "Response to Questions Raised by National Register Regarding Eligibility of Smoky Mountain Hiking Club Cabin," March 1988.

¹⁹⁶ Frome, *Strangers in High Places*, 235–36; Edward R. Smith, "Generous Godfather to Mountain Folk Creates a Retreat," *Knoxville News-Sentinel*, May 8, 1932; "Louis E. Voorheis Is Dead; Businessman, Philanthropist," *Cincinnati Enquirer*, July 18, 1944.

In 1932, Voorheis donated his Twin Creeks property to Great Smoky Mountains NP, retaining a life interest for himself and his wife. Voorheis died at the estate on July 17, 1944, and in 1952 his widow



Figure 4.3. Smoky Mountains Hiking Club Cabin under construction, 1934 (Photo #Roth0283, Roth Photograph Collection. University of Tennessee, Knoxville - Libraries).



Figure 4.4. Smoky Mountains Hiking Club Cabin, Kitchen (no longer extant), and Springhouse, 1934 (Photo #Roth0290, Roth Photograph Collection. University of Tennessee, Knoxville - Libraries).



Figure 4.5. Voorheis Estate, 1930 (Great Smoky Mountains NP archives).

sold her life estate to the NPS for \$38,000. By that time, the guest cabins were being leased to the park for employee housing. After the transfer of ownership, the lodge was used as the park superintendent's quarters until the 1970s, when the estate was converted for use as a field research facility.¹⁹⁷

Today, the Voorheis Estate consists of the lodge, two guest cabins, the main barn, a garage/stable building, and a number of landscape features. Some of the field research functions have relocated to the Twin Creeks Science and Education Center, constructed in 2007 immediately adjacent to the estate. Visiting researchers continue to use the Voorheis lodge for office space, while the NPS uses one guest cabin for office space and the main barn for seed and greenhouse equipment storage. The NPS removed two guest residences and a small cabin at the west end of the property and some landscape features, notably the stone walls east of the lodge and barn. Although other landscape features are overgrown and some are decaying, the estate overall is relatively unchanged since its construction in the late 1920s.

The Voorheis lodge consists of a two-story front-gabled stone block with three one-story, gable-roofed wings. To the left of the main block is the living room wing with a hewn-log facade and an end-wall stone chimney. At the back of the dining-room wing is a smaller wing that originally contained a bedroom and bath. Extending to the right of the main block at the back is the kitchen wing, which originally contained a servant's bedroom and bath. A shed-roofed porch wraps around two sides of the living room. The second story of the main block and all the walls of the wings retain what appears to be original shingle siding.

Facing the lodge across a looped drive is the garage/stable (former apple barn), a front-gabled building built into a hill to allow access to both levels. The upper level has a front-gable opening for automobile access, now secured by a chain-link gate. The lower level contains three horse stalls and

¹⁹⁷ "Louis E. Voorheis Is Dead; Businessman, Philanthropist"; Lix, "Short History," 70.

an open-sided drive-through area. The garage has vertical plank siding, a stone and concrete foundation, and a metal roof. It is currently not in use.

A shingle-sided guest house west of the lodge has a side-gabled main block with a gabled front dormer and a gabled rear ell. Historic photographs indicate that the guest house was built around the core of the existing Ogle-Oakley farmhouse. However, all exterior and interior finishes appear to date to the Voorheis period. A full-facade shed-roofed front porch features posts and a balustrade made from peeled logs. To the west of the guest house is the main barn, another shingle-sided building. The gambrel-roofed, transverse-frame barn is three bays wide with a central driveway constructed of woodblocks set on end flanked by animal stalls. Shed-roofed dormers are present on either side, and a hanging-gable hood shelters the hayloft door in the front gable.

Southwest of the barn is the former caretaker's residence, a one-story side-gabled building on a raised basement of rubble stone with an irregular footprint. The original gabled front porch has been enclosed. This house features an interior chimney and shingle siding. It has been used for housing but is currently vacant.

The configuration of the loop roads connecting the various buildings of the estate is unaltered, and the original dry-laid stone wall flanking the entry drive is intact. The hillside spring house and terrace pools are also largely unaltered. The area of the fountain, grotto, fish pool, and four circular pools is heavily overgrown, but the major features are recognizable.

KRESS (HALL) CABIN (SWAIN COUNTY, NC)

Businessman J. H. Kress purchased land along the Bone Creek tributary of Hazel Creek and in 1940 established a hunting lodge facility. He built a five-bedroom frame lodge with board-and batten siding and partially remodeled the 1910 Hall family log cabin on his property (figure 4.6). The lodge was demolished after the construction of Fontana Dam brought the Hazel Creek watershed within the park's boundary (only a large fieldstone chimney and portions of the foundation remain). The Kress Cabin, partially restored by the NPS, survives as the only standing structure with fabric from the settlement period in the watershed. National Register documentation for the Kress Cabin was accepted January 30, 1976.¹⁹⁸

KNOWN RESOURCE TYPES

The following resource types are associated with recreational development in the Great Smoky Mountains from 1900 to 1942: summer resort clubs, hiking club cabins, tourist cabins/hotels, and private resort estates.

Summer Resort Clubs

This resource type encompasses the areas developed as seasonal resort communities by members of recreational clubs. It includes clubhouses/hotels, individual vacation cottages and cabins, and associated infrastructure or landscape features.

Hiking Club Cabins

This resource type comprises accommodations built or rehabilitated by outdoor recreational clubs for use by their members. It includes associated outbuildings or ancillary structures.

¹⁹⁸ Paul Gordon, *National Register Nomination: J. H. Kress Cabin*, 1976 (see Appendix A).



Figure 4.6. Kress (Hall) Cabin at far left, 1953, adjacent to now-demolished Kress lodge (Great Smoky Mountains NP archives, File No. II-B-(6)-8055).

Tourist Cabins/Hotels

This resource type corresponds to accommodations built or rehabilitated to cater to tourists. It includes individual cabins, multi-room lodges, associated outbuildings or ancillary structures, and landscape features.

Private Resort Estates

This resource type identifies those properties developed as private estates. It includes primary and secondary buildings associated with an estate, as well as designed landscape features and infrastructure.

These resource types are eligible for listing in the National Register under Criterion A for their associations with early twentieth-century recreational activity and tourist development in the Great Smoky Mountains. They may also be eligible under Criterion C as representative or unusual examples of particular types of resort architecture or under Criterion B if they possess associations with significant individuals. To qualify for National Register listing under the recreation and tourism context, resources must be associated with the historical context outlined in this chapter and have been constructed or rehabilitated for recreational purposes between 1900 and 1942. Most of these resources were built prior to the establishment of Great Smoky Mountains NP, but development continued in some cases beyond 1926. Resources should retain most, if not all, aspects of integrity and clearly convey their historic associations to be eligible for listing.

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CHAPTER FIVE: THE INITIAL DEVELOPMENT OF GREAT SMOKY MOUNTAINS NATIONAL PARK, 1926–1942

This context discusses historic resources planned and mostly constructed during the initial period of the development of Great Smoky Mountains NP from 1926 to 1942. In a few cases, construction was not completed until after World War II, but some of these resources represent the completion of designs created from 1926 to 1942 or were developed in accordance with aesthetic principles from that period. National Park Service (NPS) preservation of existing historic resources within the park boundary during this period is discussed in Chapter Six.

Information on the historical context for fire prevention at Great Smoky Mountains NP during the early park development period, as well as the evaluation of the extant resources associated with this context, was taken from the recent thesis study “Every Day is Fire Day: A Study of Historic Fire Towers and Lookout Life in the Great Smoky Mountains National Park” (Laura Beth Ingle, May 2011). Given the remote locations of these resources, additional field survey was not undertaken and the existing conditions are assumed to be similar to those described in 2011.

Time and staffing constraints did not permit research, field study, and evaluation of the significance of one component of the park’s initial development: the approximately 800-mile trail system that includes 71 miles of the Appalachian Trail. Work began in 2013 on a National Register Multiple Property Documentation Form (MPDF) for the entire Appalachian Trail; individual nominations for each state’s segment of the trail will address the portion located within Great Smoky Mountains NP. A study of the historic significance of the remainder of the Great Smoky Mountains NP trail system should be undertaken and, if appropriate, an amendment to the park’s National Register documentation prepared.

The Movement for a Southern Appalachian Park, 1880–1926

The first documented proposals for a national park in the Southern Appalachian Mountains date to the 1880s. An 1885 *Journal of the American Medical Association* article proposing a health resort in the Smokies induced Ohio physician Chase P. Ambler to move to Asheville, North Carolina, where he later led the early efforts to establish a park. In 1899, Dr. Ambler and the Asheville Board of Trade formed the Appalachian National Park Association, which for six years lobbied intensively for the creation of a national park, either in the Smokies or another southern mountain range. Although the park was supported by prominent politicians in North Carolina and Tennessee, the U.S. Congress failed to act.¹⁹⁹

While Asheville businessmen promoted the creation of a national park, America’s first professional foresters advanced the idea of national forest reserves in the Appalachians. As described in Chapter Three, lumber interests by 1900 had acquired and begun to clear cut much of the remaining stands of virgin forest throughout the southern mountain ranges. Foresters like Gifford Pinchot, United States Chief Forester from 1898 to 1910, urged the federal government to demonstrate conservation-oriented management of timber resources in government-owned national forests.²⁰⁰ After repeated

¹⁹⁹ Carlos C. Campbell, *Birth of a National Park in the Great Smoky Mountains*, 2d rev. printing (Knoxville, TN: University of Tennessee Press, 1969), 15; Frome, *Strangers in High Places*, 174-75; Willard B. Gatewood, Jr., “North Carolina’s Role in the Establishment of the Great Smoky Mountains National Park,” *North Carolina Historical Review* 37 (April 1960):165.

²⁰⁰ A Division of Forestry was created within the Department of Agriculture in 1881, and Pinchot was named its chief in 1898. In 1905, the division became the United States Forest Service. The Forest Reserve Act of 1891 authorized the president to create forest reserves from federally owned land to be administered by the Department of the Interior. In February 1905, the reserves were transferred from Interior to Agriculture, and two years later they were renamed national forests (Harold K. Steen, *The U.S. Forest*

rebuffs to its national park concept, the Appalachian National Park Association changed its name to the Appalachian National Forest Reserve Association and joined the foresters' movement. These efforts finally resulted in the passage of the 1911 Weeks Law, authorizing the creation of national forest reserves in New Hampshire and the Southern Appalachians. For the first time, the federal government agreed to purchase private land for the creation of national forests.²⁰¹

The United States Forest Service (USFS) quickly established national forests on the borders of the Smokies: Cherokee National Forest in Tennessee and Pisgah and Nantahala National Forests in North Carolina. The USFS also acquired a purchase option on 61,350 acres in the Smokies held by the Little River Lumber Company. Between 1911 and 1916, the Forest Service erected fire towers and laid out fire protection trails on the optioned property. Faulty titles to some of the land delayed the creation of a national forest, and the Little River Lumber Company canceled the option when World War I brought higher lumber prices, killing any chances of providing even the limited protection of managed forestry to the Smokies.²⁰²

Interest in a national park in the Smokies never entirely disappeared in spite of early setbacks. Following World War I, a stronger national parks movement and growing automobile tourism combined to help establish Great Smoky Mountains NP. The creation of the NPS in 1916 consolidated administration of the existing western national parks and gave conservationists an institutional voice in the federal government. NPS administrators soon began considering the creation of parks east of the Mississippi River. Although little federally owned land was available in the East, many conservationists and NPS officials recognized the need for parks to provide recreational opportunities for the great eastern centers of population.²⁰³ Americans' leisure time and interest in outdoor recreation grew in the years following World War I in tandem with greatly expanded automobile ownership. As automobile registrations increased by 15 million in the 1920s, motorists demanded better roads and better recreational opportunities, and businessmen increasingly saw potential profits in catering to motor tourists.²⁰⁴

Business leaders, motorists, and outdoors enthusiasts in Knoxville, Tennessee, recognized the recreational and commercial advantages of a Smokies park and led a new promotional campaign to secure one. In 1923, the Knoxville Automobile Club and the local Chamber of Commerce formed the Great Smoky Mountains Conservation Association with the specific objective of establishing a national park in the Smokies. Leaders of the association were Willis P. Davis, manager of the Knoxville Iron Company, and Colonel David P. Chapman, owner of a wholesale drug firm. North Carolina interests also pushed for a mountain park, but many at first favored areas other than the Smokies, such as Mount Mitchell, Grandfather Mountain, Linville Gorge, and Roan Mountain (on the border with Tennessee). Hiking clubs and the state governments of Tennessee and North Carolina lent strong support to the park campaign.²⁰⁵

Responding to lobbying, congressional initiatives, and NPS advice, Secretary of the Interior Hubert Work in 1924 appointed five members to a Southern Appalachian National Park Commission. The secretary authorized the commission to study the entire southern mountain region and make recommendations for national parks. In December 1924, the commission recommended the creation of two parks—one in Virginia's Blue Ridge Mountains and one in the Great Smoky Mountains on the Tennessee–North Carolina border. Congress authorized boundary studies and the acceptance of

Service: A History [Seattle: University of Washington Press, 1976], 17, 26, 47, 74-75).

²⁰¹ Frome, *Strangers in High Places*, 176-77; Gatewood, "North Carolina's Role," 165-66; Lix, "Short History," 32; Steen, *The U.S. Forest Service* 128-29.

²⁰² Lix, "Short History," 32-33; Frome, *Strangers in High Places*, 177-78.

²⁰³ Frome, *Strangers in High Places*, 178-80.

²⁰⁴ Jakle *The Tourist*, 120-21, 145; Gatewood, "North Carolina's Role," 166-67.

²⁰⁵ Frome, *Strangers in High Places*, 182-83; Campbell, *Birth of a National Park*, 16-18; Lix, "Short History," 33-40.

gifts of land in 1925. North Carolina park boosters who had favored other sites now joined the push for a Smokies park. In April 1926, Secretary Work designated approximate boundaries for a Smoky Mountains park based on the completed studies. Finally, on May 22, 1926, President Calvin Coolidge signed legislation providing for the establishment of three new eastern parks: Great Smoky Mountains National Park, Shenandoah National Park in Virginia, and Mammoth Cave National Park in Kentucky.²⁰⁶

Land Acquisition and Early Park Development, 1926–1933

The 1926 legislation authorizing Great Smoky Mountains NP was a milestone, but it did not guarantee a park. Congress was unwilling to purchase property for the park; so all land had to be donated or purchased by the two states. The law authorized the acquisition of as many as 704,000 acres. Limited NPS administration would begin when 150,000 acres had been turned over to the Secretary of the Interior, and full development only when a substantial portion (defined by Congress in 1934 as 400,000 acres, or 57% of the maximum) of the total acreage was accepted by the secretary. In 1927, the North Carolina legislature authorized a \$2 million bond issue for land acquisition, and Tennessee appropriated \$1.5 million. Private contributions and previously committed state funds brought the total available for land acquisition to about \$5 million, just half of the sum believed to be needed.²⁰⁷

Funding for land acquisition received a tremendous boost in February 1928, when oil company heir and philanthropist John D. Rockefeller, Jr., announced a \$5 million matching grant from the Laura Spelman Rockefeller Memorial. The memorial, which subsequently was absorbed into the better-known Rockefeller Foundation, had been established in 1918 to honor Rockefeller's mother, the wife of Standard Oil Company founder John D. Rockefeller, Sr. The younger Rockefeller had a long-standing interest in America's national parks. Prior to 1928, the younger Rockefeller had donated much of the land for Acadia National Park in Maine and underwritten the construction of museum buildings in several western parks. The Rockefeller gift to Great Smoky Mountains NP also produced one of the park's most-visited manmade features, the Rockefeller Memorial at Newfound Gap, discussed more fully below.²⁰⁸

With approximately \$10 million available for property acquisition, North Carolina and Tennessee began the tedious process of acquiring individual tracts through special state commissions set up for the purpose.²⁰⁹ Assistant NPS Director Arno B. Cammerer helped establish priorities for acquisition and facilitated negotiations with landowners. Lumber companies owned 85 percent of the property sought, and most held out for the best price in protracted condemnation proceedings. The remaining land included 1,200 farms and some 5,000 vacation home sites and lots. Some residents settled quickly, while others fought condemnation through the courts. Federal appropriations of \$1,550,000 in 1933 and \$743,265 in 1938 and a small additional donation from the Rockefeller Foundation were needed to complete land acquisition. The State of Tennessee purchased the last major tract—16,288 acres owned by the Aluminum Company of America—in November 1940.²¹⁰

Development of the park proceeded by stages as land acquisition progressed. By July 1930, the federal government had accepted title to 158,876.5 acres in the Smokies, satisfying the minimum

²⁰⁶ Frome, *Strangers in High Places*, 180-89; Campbell, *Birth of a National Park*, 22-36; Gatewood, "North Carolina's Role," 167-73; Lix, "Short History," 38-47; Horace Kephart, "A National Park in the Great Smoky Mountains," Bryson City, NC: Swain County Chamber of Commerce, 1926, 3.

²⁰⁷ Frome, *Strangers in High Places*, 189-93; Campbell, *Birth of a National Park*, 50-54; Gatewood, "North Carolina's Role," 173-75.

²⁰⁸ Raymond B. Fosdick, *John D. Rockefeller, Jr.: A Portrait* (New York: Harper & Brothers, 1956), 302-20; *Rockefeller Foundation Annual Report, 1929* (New York, NY: Rockefeller Foundation, 1930); Campbell, 61-65.

²⁰⁹ The long and complex history of land acquisition is sketched in only the broadest outline here.

²¹⁰ Campbell, *Birth of a National Park*, 12, 120-28; Frome, *Strangers in High Places*, 194-95; Gatewood, "North Carolina's Role," 177-84; Carson Brewer, "Our Park is 25 Years Old Officially," *Knoxville News-Sentinel*, June 14, 1959.

requirement for limited NPS administration of the new park. In anticipation of this milestone, the NPS on June 20, 1930, named J. Ross Eakin, then superintendent of Glacier National Park, as the first superintendent of Great Smoky Mountains NP. From 1931 through 1937, annual appropriations for the administration of the park were meager because property acquisition was ongoing. No permanent visitor or administrative facilities could be constructed until the NPS and the Secretary of Interior were satisfied that funds were available to secure clear title to the 400,000 acres required for full administration, thus completing the “park project.” This did not occur until Congress appropriated the final \$743,265 for land acquisition and a small amount for park development in February 1938.²¹¹

In the park’s early years, Superintendent Eakin and a small permanent staff concentrated on establishing their authority over park property. They supervised seasonal employees in clearing old USFS fire trails and building new ones, cleaning up the mess left by logging and sawmill operations, and removing unneeded buildings from the park. Most of the removed structures were farmhouses and outbuildings; park staff also eliminated at least one hotel and a few larger buildings erected by logging companies. At the time, the two states’ highway departments were constructing the Newfound Gap Road through the heart of the park from Gatlinburg, Tennessee, to Cherokee, North Carolina. The Emergency Road Construction Bill of 1932 provided \$509,000 to the park for road and trail construction and roadside cleanup. Eakin’s early monthly reports lament his inability to serve visitors more adequately and frequently reported the eviction of squatters, moonshine distillers, and other “lawless” elements from park property.²¹²

Substantial development of the park occurred under Franklin D. Roosevelt’s New Deal administration. Roosevelt introduced a variety of public works programs designed both to pull the country out of the Great Depression and to promote conservation of natural resources; Great Smoky Mountains NP benefited from several of them. Because the NPS’s landscape design principles and master planning process were well established by 1933, the agency was able to make maximum use of the labor and funding that the New Deal programs provided. The park in the Smokies offered the NPS an opportunity to apply its design principles and planning process to a new area that lacked the imprint of previous visitor facilities. Consideration of the New Deal programs and the mature NPS approach to park design and planning provide important background to the story of the development of Great Smoky Mountains NP.

The NPS and the New Deal

President Roosevelt took office in March 1933 determined to substantially expand federal government programs for reviving the moribund national economy and helping the unemployed. Roosevelt also had a long-standing commitment to conserving America’s land and water resources. At the time of Roosevelt’s inauguration, the national economy was half the size it had been in 1929, unemployment was estimated to be greater than 25 percent, and the country was gripped by a banking crisis. Decades of short-sighted farming and resource exploitation practices had ravaged many areas of the countryside. In the first hundred days of his administration, Roosevelt submitted fifteen major bills to Congress addressing banking reform, regulation of the securities industry, improvement of industrial conditions and the depressed farm economy, and unemployment relief through public works projects and direct aid. Frequently reorganized and reauthorized under different federal agencies, public works programs remained a cornerstone of Roosevelt’s economic recovery program through the end of the decade. Of the public works agencies created under the New Deal, the most important for the national parks were the Civilian Conservation Corps, the

²¹¹ Campbell, *Birth of a National Park*, 96; Lix, “Short History,” 51-52; “Great Smokies to Observe 30th Anniversary on June 15,” *Knoxville News-Sentinel*, June 7, 1964.

²¹² Superintendent’s Annual Reports, Fiscal Years 1932, 4; 1934, 3; Superintendent’s Monthly Report, July 1932.

Public Works Administration, and the Works Progress Administration. From 1933 on, the NPS played an important role in Roosevelt's battle against the Great Depression. Almost all NPS conservation and park development projects of this period served multiple purposes: land reclamation, the provision of recreation, and boosting the economy.²¹³

Shortly after taking office, Roosevelt submitted legislation to Congress to create the Civilian Conservation Corps (CCC),²¹⁴ an agency with the dual purpose of providing work and training for unemployed young men and accomplishing much-needed conservation work on America's public lands. Congress authorized the CCC for two years as part of the Federal Unemployment Relief Act of March 31, 1933. The Act gave the President wide discretion in establishing wage rates, enrollment periods and requirements, and other administrative details of the CCC program, using whatever executive departments he deemed appropriate.²¹⁵

Roosevelt wasted no time in using his authority to establish the CCC; his goal was to have 250,000 youths at work under the program by July 1, 1933. The president's April 5, 1933, executive order assigned program responsibilities. The Department of Labor would recruit men nationwide, the Army would enroll, condition, and transport them to work camps, and the Departments of Agriculture and Interior, through the USFS and NPS, would plan and supervise work projects and administer camps. Almost immediately, the Army's role was expanded to include running the camps. The target population of each camp was 200 men. The program limited eligibility to single men aged eighteen to twenty-five years who were willing to live away from home for at least six months in camps and send at least twenty-two dollars of their thirty-dollar monthly wage home. The CCC soon expanded its ranks to include limited numbers of World War I veterans, Native Americans, and local experienced men (known as LEMs). Enrollees from the three additional categories were exempt from the standard age and marital status requirements and could live outside the camps. The LEMs usually had forestry or other specialized skills that they could teach to the inexperienced recruits, known as "juniors." Roosevelt chose the general vice president of the International Association of Machinists, Robert Fechner, as CCC director; an advisory council with representatives of the four executive departments assisted him.²¹⁶

The CCC's work was organized by six-month enrollment periods, with the first period running from April 1 to September 30, 1933. Most CCC work projects were designed to be accomplished within one six-month period. CCC projects in national parks included forest conservation; soil erosion control; fire-fighting; building roads, trails, bridges, utility lines, and recreation structures; and providing services to park visitors. Eventually, the CCC allowed recruits to re-enlist three times, for a total of two years of service. Congress re-authorized the CCC several times but rejected Roosevelt's proposals to make the program permanent. As private-sector job opportunities expanded in the late 1930s, CCC recruitment became more difficult, and Congress terminated the program in June 1942 on the grounds that it did not support the all-out mobilization required for World War II. All told, some two and one-half million American men served in the CCC, and it has remained one of the most enduringly popular New Deal programs. Through the CCC experience, enrollees with limited

²¹³ Samuel E. Morison, *The Oxford History of the American People* (New York, NY: Oxford University Press, 1965), 942-43, 954-56; Arthur M. Schlesinger, Jr., *The Crisis of the Old Order, 1919-1933* (Boston, MA: Houghton Mifflin, 1957), 3; Harlan D. Unrau and G. Frank Williss, *Administrative History: Expansion of the National Park Service in the 1930s* (Denver, CO: National Park Service, 1983), 75-77; Donald C. Swain, "The National Park Service and the New Deal, 1933-1940," *Pacific Historical Review* 41 (1972):327.

²¹⁴ From 1933 to 1937, the organization's official name was Emergency Conservation Work. The program was commonly referred to as the Civilian Conservation Corps from the start; in June 1937, Congress made the popular name the official name (John C. Paige, *The Civilian Conservation Corps and the National Park Service, 1933-1942: An Administrative History* [Washington, DC: National Park Service, 1985], 24).

²¹⁵ John A. Salmond, *The Civilian Conservation Corps, 1933-1942: A New Deal Case Study* (Durham, NC: Duke University Press, 1967), 13-23 (hereafter cited as *The CCC, 1933-1942*); Paige, 9-10.

²¹⁶ Salmond, *The CCC, 1933-1942*, 26-34; Paige, *The Civilian Conservation Corps*, 10-15.

work histories gained self-respect, learned how to work with others, and acquired marketable job skills.²¹⁷

The NPS benefited from two other New Deal public works programs, the Public Works Administration (PWA) and the Works Progress Administration (WPA). Both programs aimed to put the unemployed back to work and revive local economies through wage and construction expenditures. Established under the National Industrial Recovery Act of June 1933, the PWA was administered by Secretary of the Interior Harold Ickes. Although the PWA operated mostly through grants and loans to states and local governments for construction projects, it could initiate its own projects and make allotments to other federal agencies. The PWA worked mainly through private contractors and was not restricted to hiring the unemployed. From 1933 to 1937, the PWA allocated \$40 million for NPS projects, which included road and trail construction, campground development, museum construction, and restoration of historic structures.²¹⁸

President Roosevelt established the Works Progress Administration²¹⁹ (WPA) by executive order in May 1935 under the authority of the Emergency Relief Appropriations Act of 1935. The WPA was essentially a work relief program, and WPA employees had to meet a means test. The WPA funded many traditional construction projects but also sponsored agricultural, industrial, and demographic research; the Federal Arts Project; the Federal Writers' Project; and the Federal Theater Project. Through fiscal year 1937, the WPA allotted \$24 million to the NPS for park development, road and trail construction, beach erosion control, and the technical supervision of WPA work camps. Beginning in 1938, the NPS reported only the aggregate of funds it received from various federal public works programs; the total for fiscal years 1938 through 1940 was \$69 million.²²⁰

The CCC and other public works programs came at a time of rapid expansion and increased responsibilities for the NPS. In August 1933, President Roosevelt signed Executive Order 6166 giving the NPS jurisdiction over all historic sites, battlefields, monuments, and parks previously administered by the War Department, the Department of Agriculture, and the Office of Public Buildings and Public Parks of the National Capitol. With one stroke of the pen, NPS responsibilities were expanded from sixty-three sites to 161.²²¹ During the 1930s, the NPS was also developing large new parks east of the Mississippi River, including Great Smoky Mountains, Shenandoah, Mammoth Cave, and the Blue Ridge Parkway. Finally, the agency in the 1930s assumed important new responsibilities for planning and supervising the creation of state park systems. The infusion of funds and manpower from the CCC was critical in helping the NPS accomplish its expanded mission. Responsible for planning and supervising CCC projects on state lands as well as federal, the NPS used CCC funds to greatly increase its staff of landscape architects, engineers, and foresters. Because of the Depression, the NPS was able to draw on a pool of outstanding professionals who had few opportunities for private employment. Many professionals hired as temporaries with CCC funds eventually converted to career status with the NPS.²²²

NPS Landscape Design Philosophy

By the early 1930s, the NPS had a comprehensive, service-wide philosophy emphasizing naturalistic landscape design, development that harmonized with the landscape, and a commitment to master

²¹⁷ Conrad L. Wirth, *Parks, Politics, and the People* (Norman, OK: University of Oklahoma Press, 1980), 105; Paige, *The Civilian Conservation Corps*, 17-18, 21-24, 30-34, 79; Salmond, *The CCC, 1933-1942*, 145-61, 192-93, 210-17.

²¹⁸ Arthur M. Schlesinger, Jr., *The Coming of the New Deal* (Boston: Houghton Mifflin, 1959), 284-88; Unrau and Willis, *Administrative History*, 96-101; Swain, "The National Park Service," 324.

²¹⁹ In 1939, the name was changed to Works Projects Administration.

²²⁰ Unrau and Willis, *Administrative History*, 75, 99-101; Arthur M. Schlesinger, Jr., *The Politics of Upheaval* (Boston, MA: Houghton Mifflin, 1960), 270, 434-47.

²²¹ Unrau and Willis, *Administrative History*, 43; Swain, "The National Park Service," 323.

²²² Wirth, *Parks, Politics, and the People*, 111; Unrau and Willis, *Administrative History*, 59-62.

planning. The NPS philosophy was articulated as early as 1918 in a policy statement issued by Secretary of the Interior Franklin Lane. Lane established the principle that all roads, trails, buildings, and other development within parks should be in harmony with the landscape.²²³ In the 1920s, the NPS Landscape Division refined and elaborated this broad policy through an evolving program of comprehensive park planning and the development of specific design standards and construction practices.²²⁴

The NPS approach to landscape design evolved from well-established naturalistic landscape design principles with origins in the English landscape gardening tradition of the eighteenth and nineteenth centuries. In essence, naturalistic design sought by various techniques to artfully replicate “natural,” pastoral landscapes rather than impose a formal, geometrically inspired order on the land. Informality, broad expanses of open meadow framed by undulating tree lines, the avoidance of straight lines, and an emphasis on striking visual effects characterized naturalistic designs.²²⁵

In the second half of the nineteenth century, American landscape architects, led by Frederick Law Olmsted, Sr., adopted the English tradition and greatly expanded its application to public parks. As the twentieth century approached, landscape designers planned increasingly larger parks, while their developing understanding of ecological relationships produced an emphasis on native plant species. The success of large urban parks like Olmsted and Vaux’s Central Park in New York (developed 1858–1870s) inspired schemes for regional and state park systems. New York State created the Niagara Falls Reservation and the Adirondack Forest Preserve in 1885, and the Metropolitan Park Commission developed a regional system in the Boston area in the 1890s. Transportation advances, notably the electric streetcar and the automobile, forced landscape professionals to consider questions of access to parks and adequate circulation systems within parks.²²⁶

From the Service’s creation in 1916, NPS designers adapted well-established principles of naturalistic park design to the practical needs of national parks. Although often viewed by commentators as providing visitor access without compromising natural scenery, NPS landscape architects essentially designed the visitor’s experience of natural wonders. Every development decision—the route of a road, the site of a campground or comfort station, the massing of a building—influenced the visitor’s aesthetic reaction to a park. Frequently, NPS designers modified accepted landscape design principles to suit the larger national park properties. Additionally, by the 1920s park designs routinely accommodated ever-expanding automobile use in planning for roads, campgrounds, and other facilities. NPS practitioners also maintained close ties with leaders of the landscape architecture profession. Frederick Law Olmsted, Jr., John Nolen, Henry Hubbard, and other professional leaders strongly championed the NPS and consulted frequently both on general policies and specific projects.²²⁷

The NPS Landscape Division grew increasingly capable and self-confident throughout the 1920s as it gained experience in developing western parks for motor tourists. The role of NPS landscape architects and engineers steadily expanded until they had a strong voice in the location and appearance of all development in parks. In 1927, the NPS established a field headquarters in San Francisco, which served as the home of the Landscape Division. Landscape Architect Thomas C.

²²³ Linda F. McClelland, *Presenting Nature: The Historic Landscape Design of the National Park Service, 1916 to 1942* (Washington, DC: National Park Service, 1994), 80. The summary of NPS landscape design philosophy and practice presented here relies heavily on McClelland’s study.

²²⁴ The Landscape Division became the Branch of Plans and Designs in 1933.

²²⁵ McClelland, *Presenting Nature*, 6-7, 34.

²²⁶ Norman Newton, *Design on the Land: The Development of Landscape Architecture* (Cambridge, MA: Belknap Press of Harvard University Press, 1971), 267-79, 325-32, 558.

²²⁷ Newton, *Design on the Land*, 535; McClelland, *Presenting Nature*, 33-34; Phoebe Cutler, *The Public Landscape of the New Deal* (New Haven: Yale University Press, 1985), 57, 64.

Vint, head of the division in 1927, stayed with the NPS until 1961, eventually becoming Assistant Director for Design and Construction and providing unparalleled continuity and consistency in NPS landscape designs.²²⁸ Striving for landscape preservation and harmonization, Vint in the late 1920s established a program of master planning and design review. Each park was to have a master plan to coordinate all development. Under Vint's direction, the Landscape Division developed standard designs for guardrail, bridge abutments, culverts, and small recurring recreation facilities like comfort stations.²²⁹

As auto use grew, the siting and construction of motor roads became a critical component of the NPS's philosophy of naturalistic design. A 1926 interagency agreement between the NPS and the Bureau of Public Roads (BPR), a predecessor to the Federal Highway Administration, helped ensure that naturalistic design principles would guide park road design. Under the agreement, the BPR provided technical engineering skills while the NPS retained control of aesthetic decisions. In building roads, NPS landscape engineers strove to provide scenic views, follow natural contours, minimize cut and fill, avoid steep grades and sharp turns, and restore banks to a naturalistic appearance.²³⁰

The NPS also worked to integrate necessary park visitor and support facilities with the surrounding landscape. To do this, NPS architects developed the concepts of "visual harmonization" and "cultural harmonization." Visual harmonization relied on careful siting of buildings, horizontal massing, plantings, and the scaling of individual building members to the surrounding terrain. Thus, in rugged western mountain areas, building members often were over-scaled. Cultural harmonization meant designing structures that appeared to have been handcrafted from local, rough-hewn materials, usually logs or quarry-faced stone, and/or employing a vernacular architectural mode, usually one indigenous to the region of the park. NPS architects avoided severe straight lines and often employed or simulated "pioneer" or "primitive" construction techniques.²³¹ This approach came to be known as the NPS "rustic style" of architecture, something of a misnomer because it was less a style, with a definable set of elements, than a broad design philosophy.

Antecedents of NPS rustic architecture can be found in several nineteenth-century sources. From the 1840s until the end of the century, books by landscape architect Andrew Jackson Downing circulated widely, promoting his concepts of landscape harmonization and designs for picturesque villas, cottages, and garden structures. In the 1880s, architect Henry Hobson Richardson worked with the Olmsted firm to design structures for Boston's Franklin Park. The bold arches and rugged masonry of the Franklin Park features profoundly influenced the design of park structures for decades. Finally, the resort structures of New York's Adirondack Mountains and the American West, such as the Old Faithful Inn (1903), shaped the emerging approach to park structure design. By the early decades of the twentieth century, park designers generally believed that informal structures using rugged natural materials to blend with natural surroundings were the best choice for park development. Naturalistic landscape design and rustic architecture were the twin guiding principles of NPS park development in the 1920s and 1930s.²³² To help ensure harmonious results with park structures, the NPS Landscape Division developed design standards and detailed construction guidelines. Architects created standards for guardrail, bridges and culverts, and tunnel portals. Stone

²²⁸ Vint took the title of chief landscape architect in October 1927 and later became chief architect (McClelland, *Presenting Nature*, 116, 196-97).

²²⁹ McClelland, *Presenting Nature*, 115-16, 181-85.

²³⁰ McClelland, *Presenting Nature*, 109.

²³¹ Albert H. Good, *Park and Recreation Structures* (Washington, DC: US Government Printing Office, 1938), 5-8; William C. Tweed and Laura E. Soullière, *National Park Rustic Architecture, 1916-1942* (San Francisco, CA: National Park Service, Western Regional Office, 1977), i, 35.

²³² McClelland, *Presenting Nature*, 50-64; Tweed and Soullière, *National Park Rustic Architecture*, 3-8.

work received particular attention, with detailed guidance provided on selecting and dressing stones and breaking joints to avoid a monotonous, machine-like effect.²³³

The 1930 establishment of Colonial National Historical Park in Virginia, the creation of three large natural parks in the east (Great Smoky Mountains, Shenandoah, and Mammoth Cave), and the 1933 addition of former War Department sites to the system produced new directions in NPS design. Natural landscapes and architectural traditions east of the Mississippi River differed from those the NPS had worked with in the West. While western natural parks typically featured dramatic, large-scale mountain, canyon, or desert scenery, most of the new eastern parks were in settled rural areas with landscapes both less dramatic and more influenced by human intervention. Even the mountainous eastern areas that were developed as natural parks had gentler scenery than the Rockies or the Sierra Nevada range. Additionally, much of the East had a two- to three-hundred-year history of white settlement characterized by relatively sophisticated architecture and closer connections to European design trends. In 1930, the NPS established the Yorktown Office of the Branch of Plans under the leadership of landscape architect Charles E. Peterson. This office, which evolved into the Eastern Division of the Branch of Plans and Designs, had responsibility for developing the new eastern NPS properties. Peterson's staff modified standard NPS designs for guardrail, bridges, culverts, and recreational structures for use in eastern parks. As in the West, designers often drew inspiration from local architecture and building techniques. The dry-laid stone walls traditionally erected by some eastern farmers to divide fields were one design influence.

A notable departure for the NPS came with the designs for headquarters buildings at parks like Colonial, Kings Mountain, Great Smoky Mountains, and Guilford Courthouse. Surrounded by the architecture of the colonial period in their Yorktown office and perhaps influenced by the growing use of the Colonial Revival style for residential and roadside buildings, NPS architects designed eastern park headquarters buildings characterized by symmetry, refined detailing, and Colonial Revival elements. These buildings had a less rugged character than many western park buildings; squared quarry-faced stone and dimensioned lumber replaced boulders and peeled logs. Colonial Revival elements such as dormers and sidelighted and transomed entrances were common. Arguably, these Colonial Revival-influenced buildings adhered to NPS precepts of cultural harmonization when constructed at parks like Colonial and Guilford Courthouse that commemorated Revolutionary War battles. The Colonial Revival style had strong associations, in the popular mind at least, with the Revolutionary period.

In summary, the NPS by 1933 had well-established principles of park design and tested mechanisms for implementing them. Hallmarks of the NPS approach were: 1) preservation of the existing natural landscape; 2) the provision of easy visitor access to major scenic features; 3) a master plan for each park to guide all development; 4) a design review process to ensure that individual projects harmonized with the landscape and did not conflict with the master plan; 5) road and trail designs that followed the topography and lay gently on the land; 6) landscape restoration to erase construction scars; 7) use of rustic and vernacular architectural styles employing local materials and "pioneer" construction methods; 8) standardized plans and specifications for recurring features such as guardrail and comfort stations; and 9) guidelines for stone masonry, road bank restoration, campground design, etc., to ensure landscape harmonization.²³⁴

Planning a New Park

The NPS philosophy of naturalistic landscape design guided the development of Great Smoky Mountains NP between 1933 and 1942. From 1931 through 1933, NPS officials, engineers, and

²³³ McClelland, *Presenting Nature*, 126-31.

²³⁴ McClelland, *Presenting Nature*, 2-4, 181-85.

landscape architects made extensive study trips to the park as a prelude to design work. Charles E. Peterson, head of the Yorktown Office of the NPS Landscape Division, and Assistant Chief Engineer Oliver G. Taylor were in the park in November 1931 studying conditions. Preliminary design drawings for the park bear the stamp of the Yorktown Office, established in 1930. This office evolved into the Eastern Division of the Branch of Plans and Designs, which largely oversaw the design and development of the park until the NPS adopted a regional structure in 1937. From that point, the Region One Branch of Plans and Designs assumed responsibility. A comprehensive development plan for the park was ready by spring 1932, and engineers and landscape architects began work on the park's master plan, which was essentially completed in 1934 and approved in July 1935. Superintendent Eakin noted that it was the first master development plan prepared for an eastern park by the Branch of Plans and Designs.²³⁵ Although no major structures could be started until the park was approved for full development in 1938, a development plan was necessary to begin work on the roads and other infrastructure needed to support full development.

The development of Great Smoky Mountains NP proceeded along established NPS design principles. Park planners operated on the assumption that the vast majority of visitors would come to the park in private automobiles. It became clear early on that the Newfound Gap Road (now a segment of U.S. 441)—the only through road across the Smokies within the park—would be the primary visitor access corridor. The first visitor services were sited along this road or roads planned to connect with it, notably the Clingmans Dome Road and the Laurel Creek/Little River Road. Designers planned roads that conformed to the mountain contours and framed scenic vistas; road banks were carefully landscaped in a naturalistic style; guardrail, culverts, bridges, and curbing at turnouts were stone or stone-faced; and campgrounds and other visitor facilities were as sensitive to the landscape as possible. In logged-over areas, the CCC undertook limited reforestation efforts. To ensure a consistent appearance, the planners of the new park made extensive use of the standard designs for stonework and recurring buildings created by the Branch of Plans and Designs.

Plans had been prepared by mid-1932 for the following resources along the main park road: a park administrative center at Sugarlands, permanent campgrounds at Chimneys and Smokemont, and a secondary administration area at an undetermined location on the North Carolina side of the park. Surveys had also been done for a scenic road (Clingmans Dome Road) diverging from the main park road at Newfound Gap and running west along the crest of the Smokies to the park's west boundary (of which only the portion to Forney Ridge was completed).²³⁶

By 1935–1937, the park's master plan called for a road (Laurel Creek/Little River Road) in the northern section of the park running west from the Newfound Gap Road at Sugarlands along the valleys of the Little River and Laurel Creek to Cades Cove.²³⁷ Major tourist areas, including lodges and cabins for overnight stays, were envisioned for Sugarlands, Smokemont, and Greenbrier. In addition, a substantial expansion of the existing concessionaire's operation on Mount Le Conte was planned. Detailed plans were provided for the administration area, Chimneys and Smokemont campgrounds, a Sugarlands vacation area, Greenbrier, and Mount Le Conte. An extensive system of foot and horse trails was also part of the plan. Shelters along the Appalachian Trail, fire lookouts, and a limited restoration of pioneer structures were also envisioned. The master plan identified several areas—Cataloochee, Cosby, Flat Creek, and Heintooga Ridge—as sites for future development. A sub-administration area on the North Carolina side was planned for either Smokemont or Mingus

²³⁵ Superintendent's Annual Reports, 1932 and 1934; Superintendent's Monthly Reports, November 1931 and July 1935.

²³⁶ Superintendent's Annual Report, 1933, 3.

²³⁷ The park's archives contain the Third Complete Master Plan, dated 1937, and a 1942 edition of the master plan, including the associated development narratives. Additional undated master plan narratives are in Record Group 79 in the National Archives in Washington. Because development narratives have been separated from the large master plan sheets in the National Archives, dating is problematic. The major aspects of the park's master plan remained largely consistent throughout the 1930s.

Creek. An undetermined site near the abandoned village of Ravensford was earmarked for “the development of a transient and vacation camp for colored people.”²³⁸

Fire protection was an important aspect of the NPS’s stewardship of the new park. NPS planners relied on fire lookouts and an extensive system of fire trails, often called “truck trails” because they could accommodate a pickup truck, to combat forest fires. Fire trails often did double duty as hiking or horseback trails, but their primary purpose was to allow ready access to the back country to fight fires detected by observers in the park’s fire towers.²³⁹

Editions of the master plan from the 1930s called for substantially greater development of visitor facilities within the park than ultimately occurred. A 1936 *National Geographic* article on the new park touted the early schemes for cabin and lodge development and the extension of the Clingmans Dome Road as a “skyway” clear to the western park border. Aside from a limited expansion of facilities on Mount Le Conte, no permanent accommodations for overnight visitors were built after the creation of the park (see Chapter Four for information on hotels that pre-dated the park). Vigorous lobbying efforts by wilderness advocates defeated efforts to build the skyway, and the Clingmans Dome Road was never extended. The creation of a manmade lake in Cades Cove for aquatic sports, under consideration as late as 1937, was also abandoned.²⁴⁰ This change in the scope of projected development was in line with a change in emphasis in the conservation movement nationally, which increasingly valorized undeveloped natural areas.

Park Development under the New Deal, 1933–1942

By May 1933, when the park received its first CCC camps, only limited development had occurred (table 5.1). The state-constructed Newfound Gap Road through the park from Gatlinburg to Cherokee was open, the Tennessee portion having been completed in September 1930 and the North Carolina portion in April 1932. Park employees had cleared and improved several hundred miles of old USFS trails and built more than 55 miles of new fire trails. They had also razed or sold for removal several hundred structures, including the Champion Fibre Company sawmill complex at Smokemont. The survey and design of the Clingmans Dome Road were complete, although construction had not begun. Because no permanent campgrounds existed, the park issued individual permits for campers willing to brave the lack of facilities.

With the CCC program beginning to take shape, Superintendent Eakin went to Washington in April 1933 to plan for the establishment of CCC camps in his park. During 1933, the park received five camps in May, four in June, and six more in October. Overall, CCC camps occupied 22 different sites within the park, although all 22 never operated at one time. At the peak of CCC activity in the summer of 1935, 17 camps operated within the park. This represented almost 15 percent of the 115 camps then operating in all national parks.²⁴¹ Camps typically were identified by a number based on their location (see Table 1). Each CCC company also had a number, and companies sometimes shifted between camps. For example, in the spring of 1939, Company 415 moved from Camp NP-7, Big Creek, and occupied Camp NP-22, Cataloochee. In the summer of 1935, seven CCC companies operating in the Smokies were transferred to western states, and six new companies moved in to replace them. Only nine camps were operating by May 1936, reflecting a national reduction of the program in that presidential election year. After 1936, the number of camps and average camp size slowly dwindled until only five camps were operating in early 1942, shortly before the program ended. During the war, Civilian Public Service (CPS) Camp No. 108 operated in the park from June

²³⁸ *Great Smoky Mountains National Park, North Carolina and Tennessee, Master Plan, Third Complete Edition, 1937*. The segregated campground was never built.

²³⁹ Lix, “Short History,” 90-97.

²⁴⁰ Leonard C. Roy, “Rambling Around the Roof of Eastern America,” *National Geographic* LXX, No. 2, (August 1936), 248, 258.

²⁴¹ Wirth, *Parks, Politics, and the People*, 145; Superintendent’s Monthly Report, May 1933, 6.

Table 5.1. CCC Camps in Great Smoky Mountains National Park.²⁴²

Camp	Location	Dates of Operation
NP-1	Laurel Creek	June 1933 to September 1933
NP-2	Sugarlands (double camp)	June 1933 to July 1942
NP-3	Middle Prong, Little River	June 1933 to November 1941
NP-4	Smokemont (double camp)	May 1933 to September 1939
NP-5	Kephart Prong	May 1933 to July 1942
NP-6	Cosby Creek	June 1933 to March 1937
NP-7	Big Creek	May 1933 to June 1939
NP-8	Greenbrier	June 1933 to April 1936
NP-9	Forney Creek	May 1933 to May 1936
NP-10	Sugarlands (double camp)	September 1933 to January 1936
NP-11	Cades Cove	October 1933 to July 1942
NP-12	Elkmont	October 1933 to January 1936
NP-13	County Line, Tennessee	October 1933 to October 1935
NP-14	Smokemont (double camp)	October 1933 to September 1935
NP-15	Mingus Creek	October 1933 to October 1935
NP-16	Deep Creek	October 1933 to January 1936
NP-17	Black Camp Gap	June 1934 to October 1935
NP-18	Round Bottom	November 1934 to June 1935
NP-19	Round Bottom	November 1934 to January 1941
NP-20	Cataloochee	June 1935 to October 1935
NP-21	Never established	
NP-22	Cataloochee	June 1939 to May 1942
NP-23	Hazel Creek	September 1939 to April 1942

1943 to December 1946 out of the former Sugarlands CCC camp and continued some of the work begun by the CCC.²⁴³

The CCC was an entirely new kind of federal government involvement in the Smokies region. Area residents were reluctant to join the CCC until they saw the camps in operation, whereupon Eakin reported a rush to enroll. Eakin had generally smooth relations with the army officers who ran the camps. There were some early clashes over the construction of winter quarters and the number of

²⁴² Pyle, "CCC Camps," 5-12.

²⁴³ Charlotte Pyle, "CCC Camps in Great Smoky Mountains National Park" (typescript, 1979, Great Smoky Mountains National Park, Gatlinburg, TN), 2; Superintendent's Monthly Reports, May 1936, 3, February 1942, 5; Walter W. Miller, "The Civilian Conservation Corps in East Tennessee and the Great Smoky Mountains National Park, 1933-1942" (Research Paper, University of Tennessee History Department, 1974), 6.

men kept in camps for routine housekeeping duties, but these were soon resolved.²⁴⁴ CCC camps across the nation were segregated by race, and only white camps operated in Great Smoky Mountains NP. Eakin persuaded Fourth Corps CCC officials not to send any African-American companies to the park, arguing that “local peace officers could not be expected to protect the colored companies.”²⁴⁵

NPS landscape architects, engineers, and foresters, hired with CCC funds, planned and supervised all CCC work projects in the park. A resident landscape architect and a small office staff planned and coordinated activity at the park level, with one or two NPS landscape architects, engineers, or foresters assigned to each camp to supervise ongoing work. V. Roswell Ludgate was the park’s first resident landscape architect, serving from September 1932 to June 1936. Frank E. Mattson replaced Ludgate in June 1936 and stayed until 1941, when R. A. Wilhelm took over. At first, the CCC work crews concentrated on truck, bridle, and foot trail construction; road and trail landscaping; forest cleanup; and building barracks to serve as winter quarters. Several camps worked on road bank improvements along the Newfound Gap Road to bring it up to NPS standards.²⁴⁶ The CCC operated a nursery and stone quarry near Ravensford, North Carolina; ran fish hatchery operations at several locations within the park; and maintained a visitor count. In 1938, after a federal appropriation for land acquisition assured the completion of the park project, the Secretary of the Interior approved the erection of permanent facilities, and the pace of construction activity accelerated. Enough permanent facilities were in place by Labor Day, September 2, 1940, for President Roosevelt to officially dedicate the park in ceremonies at the Rockefeller Memorial attended by 10,000 spectators.²⁴⁷

The New Deal public works programs, particularly the CCC, were critical to the park’s development. In 1935, Superintendent Eakin observed that the CCC had helped develop the Smokies at “a much more rapid rate than any other Park ever built by the Federal Government.”²⁴⁸ Major projects completed between 1933 and 1942 included: rebuilding and landscaping of the Newfound Gap Road; the Clingmans Dome Road and associated development at Forney Ridge; the overlook, parking area, Rockefeller Memorial, and comfort station at Newfound Gap; the Chimneys and Smokemont campgrounds; the Kephart Prong Fish Hatchery; the Sugarlands headquarters complex; the Oconaluftee Administration Building; ten fire towers and nine lookout cabins; an extensive trail system; nine shelters on the Appalachian Trail; and limited restoration of pioneer structures. The Little River/Laurel Creek Road was more than 90 percent complete at the time park construction projects ceased in 1942. Each project from this period of park development is described in detail below except the pioneer structure restorations, which are discussed in Chapter Six.

Road Construction. In addition to the major road projects described in the following sections, the CCC also made improvements to existing roads within the park. Between 1934 and 1938, CCC workers stabilized the slopes of Rich Mountain Road, reconstructed two bridges, and relocated an approximately 1-mile section of Parsons Branch Road near Cades Cove. They also constructed Balsam Mountain-Straight Fork Road over abandoned logging railroad beds stretching 33 miles from Ravensford through the Cherokee reservation to Round Bottom and Balsam Mountain then south to Black Camp Gap. The primitive dirt road functioned as an NPS truck trail between 1938 and 1943, when the section from Ravensford to the edge of Heintooga Ridge was opened to motorists. From

²⁴⁴ Superintendent’s Monthly Reports, June 1933, 2, 15.

²⁴⁵ Superintendent’s Monthly Report, August 1935, 9-10.

²⁴⁶ “Great Smoky Mountains National Park, Roads – Trails – Utilities, 1934–1964,” (Great Smoky Mountains National Park, Gatlinburg, TN, 1964), n.p.; Superintendent’s Monthly Report, May 1933, 7.

²⁴⁷ Superintendent’s Monthly Reports, September 1940, 1–3, and July 1942, 10; 1937 Master Plan.

²⁴⁸ Superintendent’s Monthly Report, September 1935, 4.

1934 to 1942, CCC laborers widened and resurfaced several miles of Cataloochee Turnpike (a.k.a., Route 284) and Cataloochee Road (a.k.a., Cataloochee Entrance Road or Cataloochee Valley Road).²⁴⁹

Rebuilding and Landscaping of Newfound Gap Road (Sevier County, TN/ Swain County, NC) — The Newfound Gap Road (currently 31 miles long and designated U.S. 441) was and remains the only improved road traversing the Great Smoky Mountains in the park; consequently, its configuration and design were destined to have a profound impact on the visitor's experience of the park. The work done on the Newfound Gap Road by the states proved to be seriously deficient, and improving it was a top NPS priority. The Tennessee section (then designated Tennessee Route 71), which largely follows the West Prong of the Little Pigeon River, was almost entirely reconstructed under NPS and BPR supervision with PWA funding between 1932 and 1939. The NPS also rebuilt portions of the North Carolina section (North Carolina Route 107).

As originally built, the Tennessee portion of the road maintained an easy grade of six percent but was quite crooked and employed many switchbacks. The graded width was 24 feet with a paved surface of 18 feet. The BPR began to resurvey the road in December 1932. By increasing the grade to seven percent, BPR engineers were able to straighten the road and reduce its length by 1.35 miles while retaining much of the original grading. The greatest improvement eliminated several switchbacks by the construction of the Loop Bridge near Chimney Tops, which took traffic back under the highway in a 360-degree turn. Stone-faced concrete bridges and culverts replaced open-ditch culverts and timber bridges. The old road was kept open during the construction of the new sections. By 1937, most of the rebuilt road, except a portion where stone was being quarried, was opened to traffic. By 1939, grading, construction of drainage structures and bridges, and surfacing of the road were complete. CCC enrollees worked throughout the 1930s to remove construction scars, level and stabilize banks, and plant trees and other vegetation along this road. NPS landscape architects paid close attention to landscape treatment around major features like the Loop Bridge.²⁵⁰

The state highway department designed the North Carolina section of the Newfound Gap Road, which largely followed the valley of the Oconaluftee River. The engineers used the bed of the abandoned logging railroad running south from Kephart Prong. The state highway department built the section from Newfound Gap to Towstring Road, and the section from Towstring Road to the south boundary was constructed under BPR supervision using the state's plans. The BPR and NPS relocated small segments of this road between 1933 and 1935. From 1933 through 1940, CCC laborers from camps at Kephart Prong (NP-5), Mingus Creek (NP-15), and Smokemont (NP-4 and NP-14) did extensive landscape work on the road banks, flattening, mulching, stabilizing, and planting the slopes. Between 1961 and 1965, the NPS entirely rebuilt a 10-mile section of the Newfound Gap Road in North Carolina extending from the gap south to Kephart Prong, following alignment and design standards similar to those employed in the initial road construction (see Chapter Seven for details). The remaining 6 miles of road from Kephart Prong to the Cherokee boundary follows the original alignment.²⁵¹

²⁴⁹ Cornelius Maher and Michael Kelleher, "Great Smoky Mountains National Park Roads and Bridges, Cataloochee Valley Road," HAER No. TN-35-F (Washington, DC: Historic American Engineering Record, National Park Service, 1996), 6–13; Maher and Kelleher, "Great Smoky Mountains National Park Roads and Bridges, Heintooga Round Bottom Road and Balsam Mountain Road," HAER No. TN-35-M (Washington, DC: Historic American Engineering Record, National Park Service, 1996), 6–11; Maher and Kelleher, "Great Smoky Mountains National Park Roads and Bridges, Cataloochee Trail And Turnpike," HAER No. TN-35-N (Washington, DC: Historic American Engineering Record, National Park Service, 1996), 6–12; Maher and Kelleher, "Great Smoky Mountains National Park Roads & Bridges, Gatlinburg Vicinity, Sevier County, TN," 19–21, 62, 99; NPS, *Cultural Landscapes Inventory: Cades Cove Landscape*, 24–26, 29, 32, 38; Shields, *The Cades Cove Story*, 13.

²⁵⁰ Bureau of Public Roads, "Report on Great Smoky Mountains," "Great Smoky Mountains National Park, Roads - Trails - Utilities, 1934–1964," 1–2, 4; Superintendent's Monthly Report, March 1938, 7.

²⁵¹ Bureau of Public Roads, "Report on Great Smoky Mountains," "Roads - Trails - Utilities, 1934–1964" 2, 4; Superintendent's Monthly Report, September 1934, 6; "General Report, Fifth Period, Emergency Conservation Work, Great Smoky Mountains

Stone bridges, culverts, guard walls, retaining walls, tunnel portals, tree wells, and curbing and timber guardrail along Newfound Gap Road and the other pre-1942 park roads followed design guidelines developed by the Eastern Division of the Branch of Plans and Design. Although these guidelines grew out of those developed previously for the large western parks, stonework in Great Smoky Mountains NP used more squared-off stones, laid horizontally with more prominent joints, than was typical in the western parks. In 1932–1933, NPS Director Horace Albright approved standard stone guard wall and culvert designs for the park recommended by Charles Peterson. Guard walls consisted of simple stone parapet walls 21 inches thick and 18 inches high. For some areas, the guidelines specified guard walls that alternated 18-inch-high sections with 23-inch-high crenellated sections to avoid monotony (figure 5.1). The standards also recommended a slight batter for the ends of wall sections. As in most NPS stonework of the period, the guidelines specified irregular, roughly squared stones, to be laid up in unequal courses with broken and raked joints. Similar masonry standards applied to pipe and box culverts. Long, horizontal lintel stones were prominent features of pipe culverts, and segmental arches spanned the openings of box culverts (figure 5.2). The headwalls of pipe culverts were typically between 8 and 13 feet long and from 3 to 5 feet deep. Box culvert headwalls were 20 to 25 feet long and from 7 to 8 feet deep. Concrete-lined tunnels in the park received portals of stone with large ring stones. Curbing at overlooks and parking areas was typically a single course of local stone.²⁵² In 1935, Park Service landscape architects compiled a volume entitled *General Construction Notes for the Great Smoky Mountains National Park*. This work codified the design standards and construction experience gained in the park and helped guide the remaining development.

Numerous stone-faced bridges mark the course of the Newfound Gap Road, a two-lane road with an average paved width of 22 feet and 3-foot shoulders. Generally, arched concrete bridges with segmental arch rings span small streams, while bridges with one or more elliptical or round arches span larger ones. Each bridge and tunnel portal presented unique challenges, which NPS designers approached within the framework of the overall guidelines from the Branch of Plans and Design. An outstanding application of design guidelines occurred at the Loop Bridge near Chimney Tops, where the road makes a 360-degree turn, passing underneath itself through a tunnel. Both faces of the structure describe a gentle curve, and the masonry sheathing is meticulously laid up. The long voussoirs of the elliptical arch ring are uniformly dressed, while the wing walls employ rock-faced stones of varying size in unequal courses.

The Newfound Gap Road fully embodies the NPS landscape design principles of the 1930s. It lies gently on the land, following the valleys of the Oconaluftee River and the West Prong of the Little Pigeon River for most of its length. The road avoided steep grades and sharp changes of direction in favor of wide radial curves. Great care was taken in restoring the road banks to a naturalistic appearance by grading them to slopes of between 1:3 and 1:4 and replanting them with native species. Frequent turnouts provide stopping places for tourists to admire views, walk along streams, or gain access to trailheads. At the higher elevations, motorists are treated to vistas of mountains and valleys. In the lower valleys, the forest edge undulates, usually hugging the road shoulder but occasionally drawing back to frame small meadows. Facings of local stone on road structures promote harmony with the surrounding landscape, echoing the boulders visible in the stream

National Park,” 1935, 4–5; Memorandum, R. A. Wilhelm, Landscape Architect, to Superintendent, Great Smoky Mountains National Park, June 7, 1957; Notice of Final Inspection, Realignment of Newfound Gap Road, October 5, 1964; “Cherokee-Newfound Link Completed,” *Waynesville Mountaineer*, July 5, 1965.

²⁵² Drawing NP-GS-1004A, “Typical Headwalls, Newfound Gap Highway,” Drawing NP-GS-1006, “Stone Guardrail, Great Smoky Mountain National Park;” McClelland, *Presenting Nature*, 128–29. A section of Great Smoky Mountain guardrail is illustrated in Good, *Park and Recreation Structures*, Part I, 37.

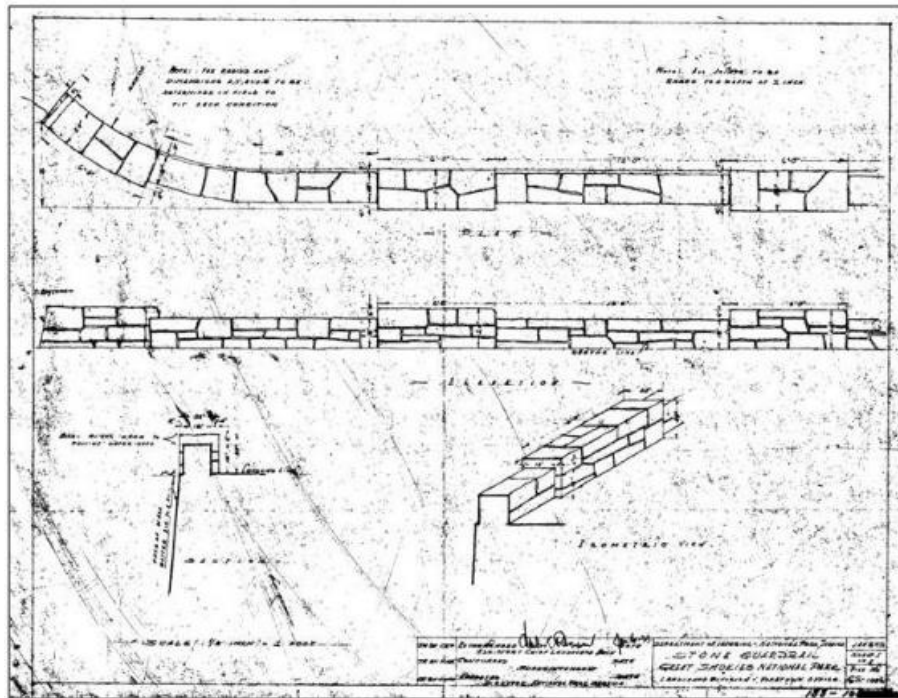


Figure 5.1. Stone Guardrail, Great Smoky Mountains National Park. Drawing NP-GSM 1006 (Great Smoky Mountains NP, Gatlinburg, TN).

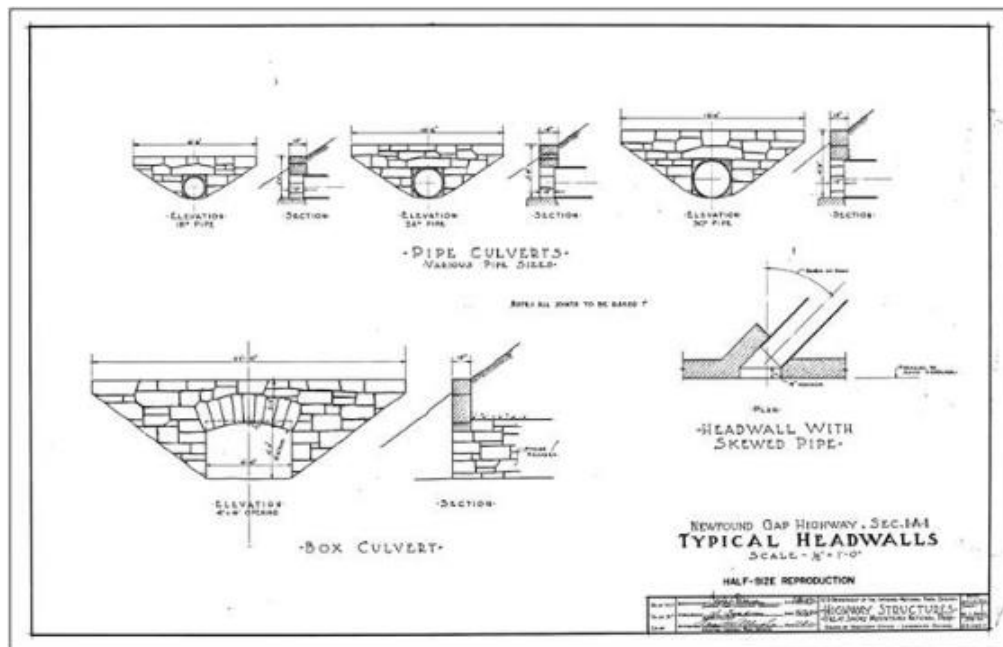


Figure 5.2. Typical Headwalls, Newfound Gap Highway. Drawing NP-GSM 1004A (Great Smoky Mountains NP, Gatlinburg, TN).

beds.²⁵³ Plans and design standards developed for the Newfound Gap Road were applied to the Clingmans Dome and Little River/Laurel Creek roads.

Clingmans Dome Road (Sevier County, TN/Swain County, NC) — The NPS originally planned this road as a scenic route running along the crest of the Smokies from Newfound Gap to the park's west boundary. Only a 7.66-mile, dead-end section was built, extending from the Newfound Gap Road, at the gap, to a parking lot on Forney Ridge, elevation 6,311 feet, on the southern slope of Clingmans Dome, a 6,643-foot peak. From the parking area at the road's end, a half-mile trail was planned to a proposed lookout tower on the summit of Clingmans Dome. The NPS also planned a comfort station near the parking area.

The BPR and NPS built the Clingmans Dome Road with PWA funding. Two engineers surveyed the route in the fall of 1932, plans were drawn during 1933, and a \$679,396 contract was let in October 1933. The road was completed in November 1935. Local stone was used for retaining walls, culvert headwalls, and curbing at pullouts following standards very similar to those specified for the Newfound Gap Road. Clingmans Dome Road lies mostly within North Carolina, following contours and running just below the topographic crest of the mountain ridge. Between 1936 and 1938, CCC laborers landscaped the banks of the road. The exposed hillside location led to considerable blow-down of trees, and many had to be guyed and anchored until they were established. The NPS first paved the road with a bituminous surface in 1951. Because of its ridge-top location, the road provides numerous vistas to the south. An unusual feature on the Clingmans Dome Road is a narrow stone-faced tunnel (built 1935) that originally carried a horse trail under the road.²⁵⁴

Little River/Laurel Creek Road (Route 3), Townsend Entrance Road (Route 3C), and Elkmont Spur (Route 4) (Sevier and Blount Counties, TN) — Early versions of the master plan called for an east-west through road from the Sugarlands headquarters area to the park's western boundary, where it was to connect with roads to Maryville, Tennessee. The proposed route was through Fighting Creek Gap to Little River, along the Little River Gorge to Tremont Junction, up the West Prong and Laurel Creek, through Crib Gap to Cades Cove and beyond. By 1938, the plan to extend this road west of Cades Cove was abandoned to better control traffic in and out of the cove. Much of the planned 18-mile road paralleled existing roads and a logging railroad bed, but the section along Laurel Creek from Tremont Junction to Cades Cove was new. The NPS also planned improvements for the 1.5-mile road that ran from the Little River Road to Elkmont. The Park Service also rebuilt one major bridge and reconstructed culverts on the 0.75-mile long road from the park boundary at Townsend to its junction with the Little River Road at Townsend Wye.²⁵⁵

Surveys for both the reconstruction of existing road segments and the new construction were done from 1934 to 1937. In March 1937, Chief Architect Vint inspected the proposed route from the Middle Prong to Cades Cove. Construction proceeded on various segments of this road until suspended for the war effort. The section from Elkmont Junction to Fighting Creek Gap was finished in 1939. Most of the work on the segment from Townsend Wye to Cades Cove was completed between 1938 and 1942. CCC men reconstructed three bridges over the Little River at Long Arm, the Sinks, and Camp Two, and built several new bridges, many culverts, and one tunnel. Several long, stream-side stone retaining walls are found along the road. The stone work adheres to the same exacting NPS standards and guidelines as similar work along the Newfound Gap and Clingmans Dome Roads. When work on the Little River/Laurel Creek Road was suspended in

²⁵³ *Road System Evaluation, Great Smoky Mountains National Park* (Gatlinburg, TN: National Park Service, Great Smoky Mountains National Park, 1985), 22.

²⁵⁴ Bureau of Public Roads, "Report on Great Smoky Mountains," n.p.; "Roads—Trails—Utilities, 1934-1964"; Superintendent's Annual Report, 1937, 5, 8; Superintendent's Monthly Report, December 1932, 4, March 1933, 3-4.

²⁵⁵ Master Plan, 1938.

December 1942, it was reported to be 92.5 percent complete. Not until the early 1950s did the NPS complete and open to the public the final section from Three Forks to Cades Cove, which included five bridges over Laurel Creek. The portion from Sugarlands Headquarters to Fighting Creek was also rebuilt between 1947 and 1952.²⁵⁶ The sections of the road completed after World War II conform in all essential respects to the design philosophy and guidelines of the previous period.

The spur road from the Little River Road to Elkmont follows the route of tracks laid by the Little River Railroad and abandoned in 1924. The State of Tennessee built a road over this right-of-way between 1928 and 1931. CCC men built two bridges in 1938 and 1939 on this road. The first, spanning the Laurel Branch just south of the junction with the Little River Road, is a slightly curving single-elliptical-arch concrete bridge with stone facing. The second, spanning the Little River at Elkmont, is an impressive four-span structure that uses large sections of steel tubing to form its barrel vaults. The CCC poured concrete over the steel forms and faced the entire structure with local stone.

The short Townsend Entrance Road features one impressive stone-faced bridge over the Middle Prong of the Little River with a 90-foot opening, as well as a number of stone-faced culverts.

Newfound Gap Overlook (Sevier County, TN/Swain County, NC). Newfound Gap was not only the highest elevation (5,548 feet) on the park's principal thoroughfare; it was also the original beginning point of the Clingmans Dome Road. NPS designers planned a scenic overlook and parking area with a comfort station for this spot and chose it as the site of the Rockefeller Memorial.

Newfound Gap Parking Plaza—As originally designed and built, the main road widened into a largely symmetrical triangular parking area for 95 automobiles at Newfound Gap, with the Clingmans Dome Road exiting from one apex of the triangle (figure 5.3). A long landscaped island divided the parking area from the traffic lanes, and several smaller islands separated the two lanes of through traffic. Within the parking area itself, cars could park along either side of a low stone wall anchored by landscaped ovals or along a walkway and massive buttressed stone wall that defined the southeastern edge of the parking area. This walkway also provided vistas into North Carolina. The parking area was complete by 1938. The CCC contributed stone work and landscaping to the project. In a 1960s Mission 66 project, the NPS enlarged and reconfigured the parking plaza as part of an overall scheme to reduce traffic congestion at Newfound Gap; see Chapter Seven for more details on these alterations.²⁵⁷

Newfound Gap Comfort Station—NPS architects prepared plans for a comfort station in September 1937 to serve the Newfound Gap Overlook. The site chosen was secluded, out of view of both the parking area and the Rockefeller Memorial. CCC laborers from one of the Sugarlands camps (NP-2) and the Kephart Prong camp (NP-5) began construction in July 1938, and the facility opened in April 1939. In 1967, Job Corps enrollees rehabilitated this comfort station, the first of eight stone comfort stations erected in the park by the CCC. These stations followed one of two standard designs developed for the western national parks, a larger type being used at Newfound Gap and Forney Ridge than the type used at Chimneys and Smokemont campgrounds. All eight employed the same materials: large slabs of locally quarried stone, dimensioned lumber, and wooden roof shingles. These buildings embodied the NPS rustic style as it evolved in the West. Conditions at each site dictated minor variations in individual buildings. At Newfound Gap, the station was partially built into the hillside on the north.

²⁵⁶ Master Plan, 1942; Superintendent's Monthly Report, October 1942, 3, August 1950, 1; "Inventory and Inspection Report, Cades Cove Road" (typescript, September 11, 1950, Great Smoky Mountain National Park, Gatlinburg, TN).

²⁵⁷ Superintendent's Annual Report, 1937, 5; Superintendent's Monthly Report, September 1937, 4; Drawing #2166, "Parking Areas," part of 1942 Great Smoky Mountains National Park Master Plan.

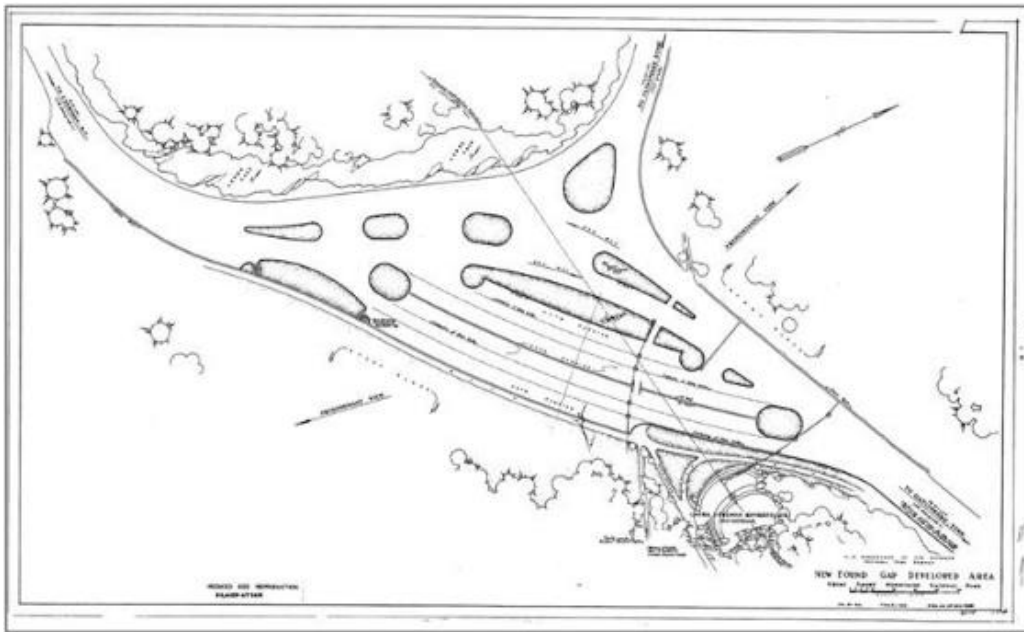


Figure 5.3. Newfound Gap Developed Area. Drawing NP-GSM 60700 (Great Smoky Mountains NP, Gatlinburg, TN).

A 15-foot by 48-foot rectangle in plan, the station at Newfound Gap is a low gable-roofed building with stone privacy walls extending out from the building at both ends. An unequal-sided gable roof shelters most of the structure, and a lower, equal-sided roof continues from the main roof at the east end. The walls are slightly battered, larger stones are used at the base, and long stones are used for sills. The building originally had two small lavatories for African-American men and women at the east end. Plumbing fixtures have been removed from these rooms.²⁵⁸

Landscape harmonization was achieved by siting the comfort station out of view of the Rockefeller Memorial and building one side of it into the hill itself. The low horizontal massing and the choice of local stone also exemplified the NPS naturalistic design philosophy. The slight batter of the wall and the use of larger stones at the bottom helped foster the illusion that the comfort station sprang up “naturally” from the earth.

Rockefeller Memorial—The Rockefeller Memorial at Newfound Gap brought together John D. Rockefeller, Jr., whose largesse helped make the park possible, and Henry V. Hubbard, a prominent American landscape architect.²⁵⁹ The \$5 million matching grant for land acquisition from the Laura Spelman Rockefeller Memorial required that a permanent memorial be erected in the park, inscribed “to the effect that the park was established, one-half by the people and States of North Carolina and Tennessee and one-half in memory of Laura Spelman Rockefeller.”²⁶⁰ The legislatures of Tennessee and North Carolina each appropriated \$10,000 for the memorial’s design and construction. In December 1937, NPS Director Arno B. Cammerer wrote Frederick Law Olmsted, Jr., of the famous

²⁵⁸ Drawing NPS-GSM 2086, “Comfort Station, Newfound Gap,” Superintendent’s Monthly Reports, May 1938, 4; July 1938, 5, April 1939, 6; Memorandum, Park Historian to Chief, Resource Management, December 7, 1984.

²⁵⁹ Hubbard was professor of landscape architecture at Harvard University from 1906 to 1941, long-time editor of the journal *Landscape Architecture*, a partner in the Olmsted Brothers firm, and author of the widely used text *An Introduction to the Study of Landscape Design* (McClelland, *Presenting Nature*, 40-45).

²⁶⁰ Arno B. Cammerer to Mr. Frederick Law Olmsted, December 3, 1937.

landscape architecture firm Olmsted Brothers, asking if Olmsted would be interested in designing the memorial. Henry Hubbard, a partner in the firm, met with Cammerer on December 16; the two agreed on a fee not to exceed \$1,000 for two site visits and the memorial's design and decided that Hubbard would take charge of the commission if Olmsted proved unavailable. It must have been clear that Olmsted would not be available, because all further contacts were with Hubbard.²⁶¹

What Rockefeller and Cammerer envisioned was a cast bronze tablet "affixed to a boulder or cliff ... in a more or less natural setting, with simple surroundings."²⁶² In early April 1938, Hubbard, NPS Chief Architect Thomas Vint, Great Smoky Mountains NP Resident Landscape Architect Frank Mattson, and Superintendent Eakin inspected various prospective locations for the memorial. From the inception of the park idea, state rivalries influenced the location of facilities, and a memorial site on the North Carolina-Tennessee border was most likely to be acceptable to both states. Because the most accessible point on the border was at Newfound Gap on the park's main road, this location, almost inevitably, was selected. Hubbard and Vint chose the nose of a rock that closed the gap on the east and had been partly shattered by road grading operations. The two men also chose a site for the comfort station to serve the rest area and overlook at Newfound Gap, locating it behind the rock outcrop so it would not detract from the memorial. After viewing the site, Hubbard suggested a memorial that was considerably more elaborate than a tablet attached to a natural feature. He proposed creating two stone-faced terraces, with the wall of the upper one carrying the bronze tablet. The upper terrace would provide vistas into both Tennessee and North Carolina. On April 7, Hubbard and Vint met with Cammerer and secured his approval of this plan.²⁶³

Hubbard returned to the Olmsted office in Brookline, Massachusetts, to prepare drawings and a model for the memorial, while Cammerer and Rockefeller worked out the exact wording of the tablet. Rockefeller suggested that Paulanship, a noted American sculptor with long-standing ties to the Rockefeller family, design the tablet.²⁶⁴ Manship accepted the commission and produced an elaborate preliminary tablet design incorporating a stylized deer in low relief, which he offered at \$8,000 delivered to Gatlinburg, Tennessee. This proposal was problematic in terms of both its design and cost. The NPS Wildlife Division strongly objected to any artistic depictions of animals in national parks, and Manship had to give up his deer. The tight overall budget of \$20,000 left little for the tablet's design and fabrication, and Manship eventually agreed to supply a simple rectangular tablet with a molded border for \$3,500. Hubbard also convinced Manship that a horizontally oriented tablet was more suitable than the vertical design that Manship originally proposed. In July 1938, Thomas Raoul of the North Carolina Park Commission suggested that a drinking fountain be incorporated into the memorial, and Hubbard and Vint accepted the idea. Hubbard then designed a fountain with a bronze spout for the lower terrace.²⁶⁵

As the design of the memorial evolved, Hubbard and Vint searched for a landscape professional to oversee its construction. In June 1938, Vint proposed Henry E. Rice, an NPS landscape draftsman at the Jefferson National Expansion Memorial in St. Louis, for this task. Hubbard approved the

²⁶¹ H. V. Hubbard, Memorandum to Laura Spelman Rockefeller Memorial File, December 16, 1937; Henry V. Hubbard to Arno B. Cammerer, December 31, 1937.

²⁶² Hubbard to Cammerer, December 31, 1937. An early drawing from the branch of Plans and Designers shows a small tablet attached to a stone at the side of a road.

²⁶³ Superintendent's Monthly Report, April 1938; Henry V. Hubbard Trip Report, April 2-7, 1938; Henry V. Hubbard to Arno B. Cammerer, June 1, 1938, Olmsted Papers; Drawing 9516-10, "Laura Spelman Rockefeller Memorial-Construction Layout Plan," revised August 15, 1938.

²⁶⁴ One of Manship's most striking early works had been a 1918 marble portrait bust of John D. Rockefeller, Sr.; and the sculptor's 1934 gilded bronze figure of Prometheus was, and remains, a focal point of Rockefeller Center in New York (Edwin Murtha, *Paul Manship* [New York, NY: Macmillan Co., 1957], 167, 178).

²⁶⁵ John D. Rockefeller, Jr., to Arno B. Cammerer, April 21, 1938; Paul V. Manship to Henry V. Hubbard, May 26, 1938; Arno B. Cammerer to Henry V. Hubbard, May 28, 1938; Arno B. Cammerer to Paul V. Manship, June 8, 1938; Henry V. Hubbard to file, July 30, 1938; Henry V. Hubbard to H. T. Thompson, February 1939, all in Olmsted Papers.

selection of Rice, and a July construction estimate specified locally quarried conglomerate sandstone for the memorial. The Ronan Bronze Works cast the tablet and drinking fountain spout. In December 1938, Rice arrived in the park to supervise construction. Actual construction was privately contracted, but the CCC prepared the site, transported materials, and carried out landscaping plans. Hubbard and Rice consulted on final details of the design in the early months of 1939, with Hubbard and Vint returning to the park in April to inspect construction. The memorial was completed in September 1939 and served as the site of the park's formal dedication by President Roosevelt in September 1940.²⁶⁶

As constructed, the Rockefeller Memorial consists of two semicircular terraces with battered sandstone walls and sandstone pavers and steps. The wall of the lower terrace is approximately 6 feet high and 74 feet long. A rectangular bronze plaque commemorating the park's 50th anniversary in 1984 is mounted near the center of the wall. The upper terrace wall is 15.5 feet high and 83 feet long. The walls of both terraces extend above the flagstone pavers to form low parapets. A curving stair of 26 steps ascends from the lower to the upper terrace on the south. Just north of the base of the stair is the drinking fountain, consisting of a basin stone projecting from the battered wall and a bronze spout with a stylized Art Moderne-influenced geometric design. At the north end of the upper terrace are steps to a small lookout area that swells out from the main wall. Mounted on a large rectangular stone in the wall of the upper terrace so as to be legible from the lower terrace is the bronze tablet, 6 feet wide by 4.5 feet high, inscribed as follows:

*“For the permanent enjoyment
of the people
this park was given
one half by the peoples and states
of North Carolina and Tennessee
and by the United States of America
and one half in memory of
Laura Spelman Rockefeller by the
Laura Spelman Rockefeller Memorial
founded by her husband”*
John D. Rockefeller.

Chimneys Campground (Sevier County, TN) and Smokemont Campground (Swain County, NC). The lack of permanent campgrounds created serious sanitation problems in the park's early years. Superintendent Eakin believed that he could not practically ban campers from the park and tried to disperse them at temporary camp sites equipped with pit toilets.²⁶⁷ The development of permanent campgrounds was consequently a top priority. The first two, at Chimneys (elevation 2,750), 6 miles south of the Tennessee park entrance, and Smokemont (elevation 2,198), 5 miles north of the North Carolina entrance, were designed to be easily accessible. Both were reached by short spur roads from the Newfound Gap Road and were sited in river valleys, where reasonably level land and water supplies were available. Chimneys had 81 camp sites and Smokemont originally

²⁶⁶ John D. Rockefeller to Arno B. Cammerer, April 21, 1938, Olmsted Papers; Estimate for Laura Spelman Rockefeller Memorial, July 1938, Olmsted Papers; Superintendent's Monthly Reports, December 1938, January, April, and September 1939.

²⁶⁷ Superintendent's Monthly Report, July 1932, 5.

had 100 before it was expanded. Both campgrounds had long looping roads with campsites that included an “individual campfire stove, a table and a tent site adapted to topography, and a parking spur constructed to reasonably confine the car to the area.”²⁶⁸ This was in line with the NPS policy of minimizing damage to vegetation by confining cars to roads and clearly identified parking spurs within campgrounds. Naturalist Emilio P. Meinecke, consultant to both the USFS and NPS and a pioneer of modern campground design, developed the “garage spur” and other campground features in the late 1920s and early 1930s.²⁶⁹

By summer 1934, CCC laborers were leveling ground and laying out and surfacing roads with gravel at both campground sites. In June 1934, Meinecke inspected the campground sites and offered “very constructive criticism.”²⁷⁰ The CCC continued to develop the campgrounds in 1935, and in 1936, PWA funds permitted the installation of water and sewer systems; however, the campgrounds could not be opened until comfort stations were constructed. Architects prepared plans for three standard Type #1 stone comfort stations for each campground in 1937, and the CCC began constructing them in 1938. The comfort stations were similar in design and materials to the one built at Newfound Gap but were smaller, entirely freestanding, and sited to serve different sections of each campground. By July 1938, one station had been completed at each campground, and the park officially opened Chimneys and Smokemont campgrounds to the public on July 30, 1938.²⁷¹

Now a picnic area, the Chimneys Campground was laid out with long looping roads on the south bank of the West Prong of the Little Pigeon River, creating three lobes that originally accommodated 81 automobile campsites with “garage spurs” of 10 by 20 feet (figure 5.4). Each campsite originally had a stone fireplace (now removed) and an integral picnic table/bench combination. Traffic was one way only on most of the 10-foot-wide campground roads. Ten drinking fountains appear on some plans, but only four are currently present. Either only four were constructed originally, or perhaps some have been removed. The fountains are carved from solid blocks of stone. The Chimneys Campground also originally included ten fish-rearing pools, constructed by the CCC in 1934 and placed in operation in April 1935. Located north of the campsites on the bank of the West Prong of the Little Pigeon River, the concrete pools were roughly rectangular, followed the contours of the hillsides, and were outlined with broken-range stone quarried and dressed at the job site under the supervision of T. L. Yon, a CCC locally employed man. Until 1942, when the CCC program ended, CCC men raised trout fingerlings in the pools for release into park streams. The outlines of several pools are still visible.²⁷²

The Smokemont Campground was laid out similarly to Chimneys in a long loop on the east bank of the Bradley Fork of the Oconaluftee (figure 5.5). At the onset of World War II, Smokemont had seventy automobile campsites in the lower area (Sections A, B, and C) and thirty trailer campsites in the upper area (Section D). Each automobile campsite had a 9-by-18 foot parking spur, a stone fireplace, and a table/bench combination. Scattered around the campground are nine rustic-style stone drinking fountains employing flat stones laid horizontally. CCC men also built an amphitheater at Smokemont, which was replaced by a new amphitheater in the Mission 66 period. Still functioning as a campground, Smokemont received forty additional campsites, three comfort stations, and a campground store/shelter (later removed) after 1945 (see Chapter Seven for details).

²⁶⁸ Undated Master Plan narrative, 1935.

²⁶⁹ Meinecke’s ideas, as set forth in *A Camp Ground Policy* (1932) and *Camp Planning and Camp Reconstruction* (1934), were quickly adopted by the NPS and were enormously influential.

²⁷⁰ Superintendent’s Monthly Report, June 1934.

²⁷¹ Drawings NP-GSM 3027 and 3027B, “Comfort Station - Type 1,” January 25, 1937.

²⁷² Superintendent’s Monthly Reports, September 1934, 5, April 1935, 9; Master Plan narrative, 1942.

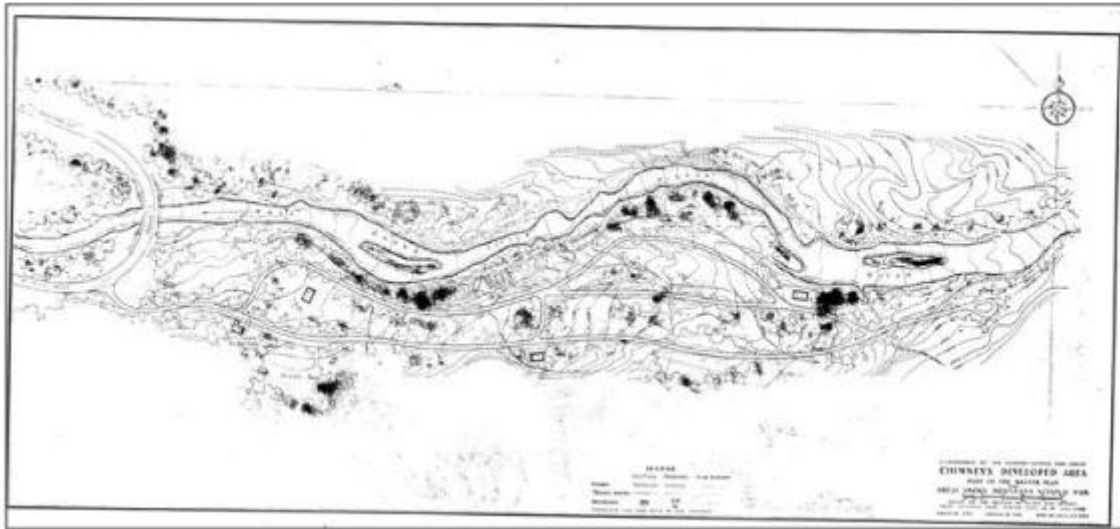


Figure 5.4. Chimneys Developed Area, 1939 Master Plan (Great Smoky Mountains NP, Gatlinburg, TN).

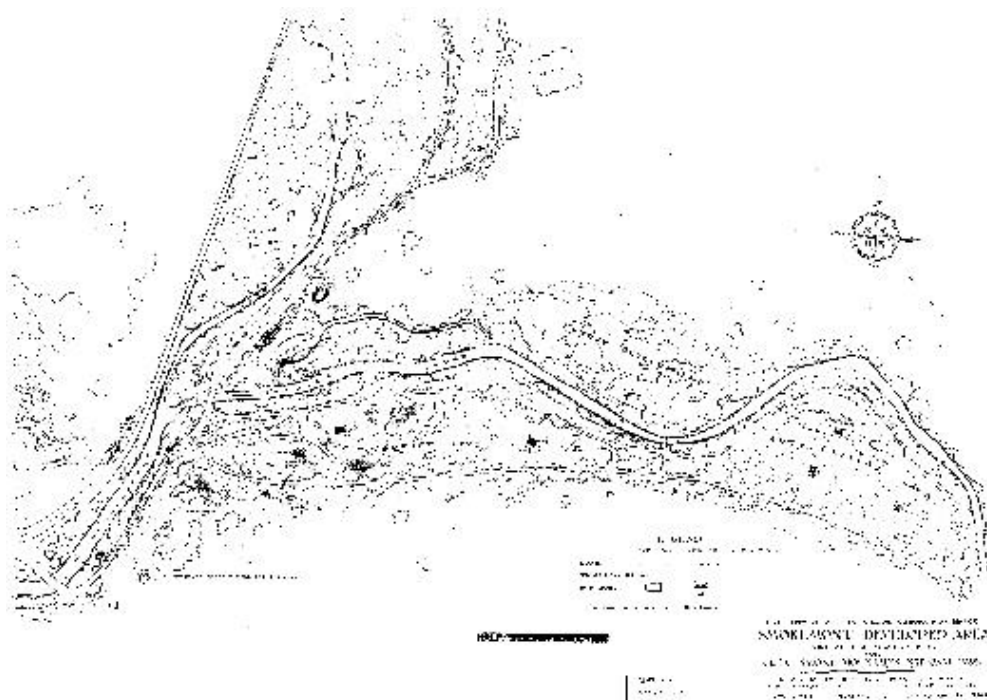


Figure 5.5. Smokemont Developed Area, 1941 Master Plan (Great Smoky Mountains NP, Gatlinburg, TN).

Constructed of large slabs of locally quarried stone laid up in battered walls, the six 1930s comfort stations at the two campgrounds are low, gable-roofed buildings with average dimensions of 31 by 20 feet (figure 5.6). Larger stones are used near the foundation, and long stones are used as sills. Purlins made from 6-by-6 dimensioned lumber project at the gable ends. Men's and women's toilets are accessed by doors in the gable ends that are flanked by a square window on each side. In one long side of each station is a door to a utility room; two windows on either side of this door light the restrooms. Vertical planking was originally used in the gable ends but has been replaced by louvers and additional windows in various configurations at each station. All six stations now have asphalt shingle roofs in place of the original wood shingles; bubble-type skylights have been introduced at Chimneys comfort stations #2 and #3.

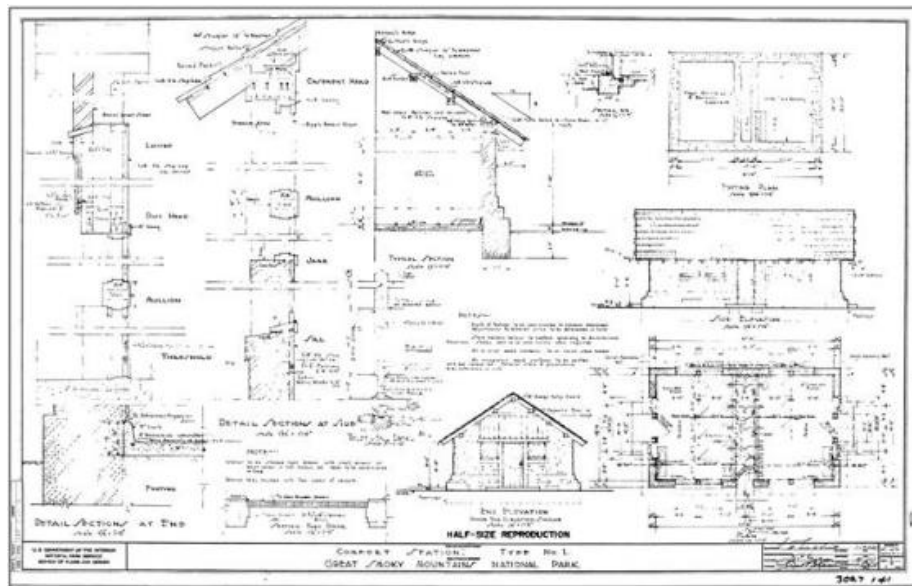


Figure 5.6. Comfort Station – Type 1. Drawing NP-GSM 3027 (Great Smoky Mountains NP, Gatlinburg, TN).

Forney Ridge Overlook (Swain County, TN). At the end of the Clingmans Dome Road, NPS landscape architects designed a parking area at Forney Ridge for 250 automobiles. The parking area is crescent-shaped and follows the contours of the ridge (figure 5.7). An elongated, boomerang-shaped planted island separates parking lanes and mediates the grade change; traffic is routed one way around the island, and another small island splits the two lanes of traffic at the entrance to the parking area. The NPS installed three vault toilets near the west end of the larger island ca. 2010. Curbing and parapet walls are of local stone. Along the downslope edge of the parking area is a sidewalk that provides scenic views south into Tuckasegee Valley. CCC laborers landscaped the parking area and built a trail from its western end to the summit of Clingmans Dome. Because spruce trees on the summit obscured views, the CCC in 1937 began work on a log observation tower, which was completed in 1938. Supported by four large timbers at the corners, the tower's 14-foot-square observation platform was 40 feet above the ground. Park staff removed the deteriorated tower in 1950. As part of the Mission 66 effort, the NPS erected a poured concrete observation tower with a spiral ramp on Clingmans Dome in 1959 (discussed in Chapter Seven).²⁷³

²⁷³ Superintendent's Monthly Report, September 1938, n.p., June 1939, 4, July 1939, 2, July 1941, 4, August 1941, 3; Superintendent's Annual Report, 1937, 5-6; Hubbard Trip Report, April 2-7, 1938; Letter, H. F. Holt to R. P. White, June 30, 1939; Carson Brewer, "Clingmans Dome Tower Opened," *Knoxville News-Sentinel*, October 24, 1959.

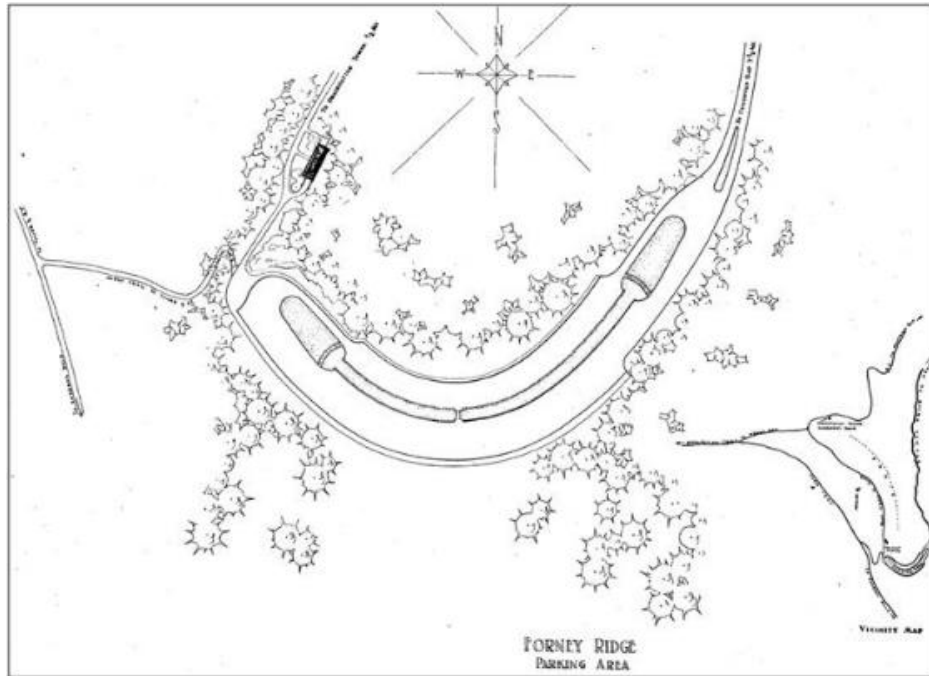


Figure 5.7. Forney Ridge Parking Area, 1941 Master Plan (Great Smoky Mountains NP, Gatlinburg, TN).

CCC men from the NP-2 camp at Gatlinburg began work on a stone comfort station near the west end of the parking area in July 1939, and the Forney Ridge comfort station opened in July 1941. CCC enrollees also graded and planted around the building in 1941. In 1968–1969, Job Corps enrollees remodeled the comfort station and altered its immediate surroundings. The NPS converted the facility ca. 2010 to a seasonal visitor information center, installing new synthetic roof shingles, wood doors, and aluminum nine-light windows. The building is similar to the Newfound Gap comfort station but has a conventional, rather than a divided, gable roof. Built into the side of the hill, it is 54 feet by 20 feet, with an L-shaped wing wall at the north end of the building that provided privacy for the entrance to the women’s restroom (now a service entrance). The main entrance to the visitor center is located in the building’s broad western side, where entry to the men’s room was originally. Additional entrances at the east end of the building originally gave access to two small lavatories for African-American men and women. A narrow utility space occupies the back of the building. The slightly battered stone walls incorporate larger stones near the foundation, and stones corbeled out at the corners of the building add to the rustic effect. Projecting eaves with exposed rafter ends give a sense of shelter, and the siting of the building partially within the hillside promotes landscape harmonization.²⁷⁴

Originally, flagstone walks surrounded the comfort station and two flights of stone steps centered on its broad side gave access from the path that ascended to the summit of Clingmans Dome. The Job Corps laborers built a stone retaining wall bordering the path, constructed concrete steps at the south end of the station, and provided a paved walk at the north end. Paved walks also replaced the flagstones immediately surrounding the building.²⁷⁵

Fire Prevention. To facilitate early detection of and response to forest fires, the NPS constructed ten fire lookout towers and nine lookout cabins in the park between 1934 and 1939. Several more

²⁷⁴ Drawing NP-GSM 2006A, “Comfort Station - Forney Ridge,” August 31, 1939.

²⁷⁵ Building files, Forney Ridge Comfort Station, Building #160, Great Smoky Mountains National Park.

towers were built just outside the park's boundaries in adjacent national forests to work in cooperation with the NPS. Fire towers were a critical component of the initial wildfire management policy developed by the United States Forest Service (USFS), which called for complete fire suppression as opposed to the prescribed burns generally employed to control wildfires in public lands today. During the 1930s, the CCC built 3,400 fire towers across the country. In Great Smoky Mountains NP, they constructed nine of the ten towers and the corresponding cabins; the NPS and the PWA are listed as the builders for the Shuckstack tower.²⁷⁶

In the 1970s, both the USFS and the NPS shifted away from fire suppression as a general policy. At the same time, they stopped manning fire towers in favor of more modern techniques such as aviation management.²⁷⁷ Many of the structures associated with fire control deteriorated over the subsequent decades due to lack of maintenance, and large numbers of fire towers were removed. Four towers and one cabin remain extant within Great Smoky Mountains NP.

Ordinarily the highest points of vantage within a park were selected for the location of fire towers, but atmospheric conditions in the park necessitated a deviation from customary procedure because the highest points are frequently under clouds.²⁷⁸ For maximum effectiveness, fire tower sites were chosen so that each viewshed would overlap with at least one other tower and provide about 10 to 15 miles of visibility.²⁷⁹ In most situations, a steel tower was necessary to raise the observation area above the treetops. The seasonally employed fire tower watchmen, termed lookouts, resided in a separate cabin near the base of each tower. In the 1920s and 1930s, the USFS and NPS widely used pre-fabricated, open-frame steel towers manufactured by industrial companies such as International Derrick Equipment or Aermotor Windmill.²⁸⁰ Most rose to a height of 60 feet with a square metal cab at the top, walled with tilting windows and accessed through a trap door in the floor. Trenches lined with copper wire around the towers provided lightning protection. Telephone wires connected the towers to CCC base camps and central fire management offices.²⁸¹ Several standard designs existed for the lookout cabins, all constructed of logs. The most common consisted of a single 17-by-17-ft room with an off-center front door opening onto a simple 6-ft-by-17-ft, shed-roof porch supported by three evenly spaced columns. Larger examples had a wrap-around porch or three rooms.²⁸²

All but one of the towers within Great Smoky Mountains NP, and three of the remaining four, were the steel type with a detached log cabin. The PWA erected the Shuckstack Fire Tower in 1934, at an elevation of 4,020 feet overlooking the Fontana Dam in Swain County, North Carolina, two-and-one-half miles from the Twentymile truck trail. The CCC constructed the Mount Sterling and Cove Mountain towers in 1935. The Mount Sterling Tower, the highest tower in the park, sits at an elevation of 5,835 feet in Haywood County, North Carolina, just under three miles by trail from service roads to Mount Sterling Gap. The Cove Mountain Tower in Sevier County, Tennessee, is located at an elevation of 4,091 feet, a four-mile hike off Fighting Creek Gap Road. The High Rocks Tower is no longer extant, but the adjacent lookout cabin constructed from 1935–1936 by the CCC remains. The Swain County, North Carolina, site is one of the most remote and difficult-to-reach in the park, approximately 10 miles by trail from the end of Lakeview East Road, at an elevation of 5,185 ft.²⁸³

²⁷⁶ Laura Beth Ingle, "Every Day is Fire Day: A Study of Historic Fire Towers and Lookout Life in the Great Smoky Mountains National Park," Master's thesis, The Graduate Schools of Clemson University and the College of Charleston, 2011, 13, 19.

²⁷⁷ Ingle, "Every Day is Fire Day," 26.

²⁷⁸ 1939 Master Plan.

²⁷⁹ Ingle, "Every Day is Fire Day," 33.

²⁸⁰ Ingle, "Every Day is Fire Day," 54-55.

²⁸¹ Brown, *The Wild East*, 126.

²⁸² Ingle, "Every Day is Fire Day," 56.

²⁸³ Ingle, "Every Day is Fire Day," 56-60.

Mount Cammerer (known as White Rock Mountain until 1942) in Cocke County, Tennessee, presented a different situation. The summit of this 4,926-ft peak in the northeast corner of the park is a bald rock outcrop visible for many miles. Although Superintendent Eakin favored a simple sheet-metal cab, NPS Chief Forester J. D. Coffman held out for a stone structure with integral living quarters. Coffman believed that a low stone lookout of the type commonly used in the West would be less of a visual intrusion. After considerable correspondence between the park and Washington, Assistant Director Conrad L. Wirth in March 1937 approved plans for a Type #9 octagonal stone fire lookout (figure 5.8). This was one of several standard plans for fire lookouts developed between 1930 and 1932 by the NPS Landscape Division under Thomas Vint's supervision.²⁸⁴

CCC men from the Mount Sterling camp (NP-7) began construction of the lookout in June 1937 under the supervision of NPS employee Marshall Fox, who had learned stone masonry in the CCC. Workers quarried stone for the walls some 100 to 300 feet below the building site and felled nearby trees for roof timbers and shingles. Rough blocks of stone were transported by hand on wooden pallets to the building site, where they were hewed and finished. Sand and cement for mortar, windows, and hardware came up the mountainside on mule back from the Mount Sterling CCC camp. The CCC enrollees completed the White Rock/Mount Cammerer Tower in September 1939.²⁸⁵

The Mount Cammerer Fire Tower is a two-story octagonal structure partially built into the side of the mountain. The battered walls of roughly squared stone are laid up in broken courses and rise to the level of the windows on the second level, where the lookout lived and worked. The lower level was used for storage. Each of the eight sides originally had three double-hung windows, permitting views in all directions. Peeled round-log rafters support an eight-sided pyramidal roof. Originally, a log and plank observation platform or balcony carried on angled log supports girded the structure.

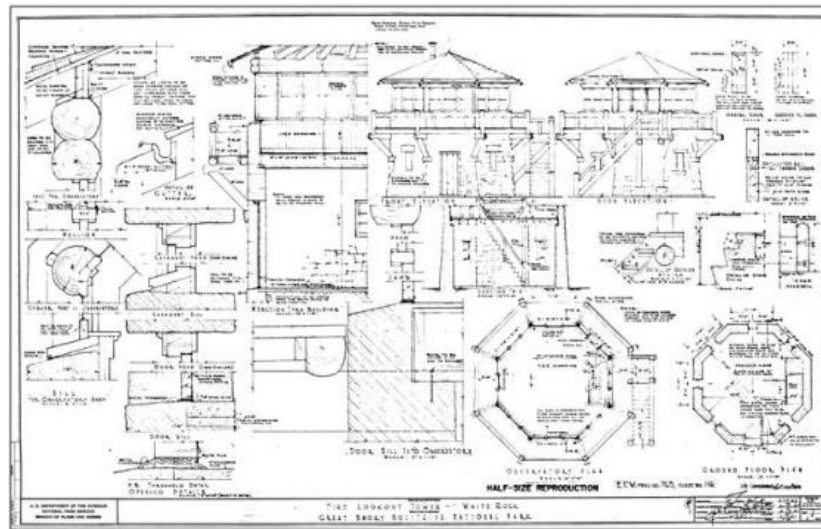


Figure 5.8. Fire Lookout Tower – White Rock. Drawing NP-GSM 1126 (Great Smoky Mountains NP, Gatlinburg, TN).

²⁸⁴ J. D. Coffman to J. Eakin, November 4, 1936; J. R. Eakin to Regional Officer, Region One, December 3, 1936; Conrad L. Wirth to J. R. Eakin, March 9, 1937; Drawing NPS-GSM 1126, 1937.

²⁸⁵ Edward L. Trout, "Draft Historic Structure Report: Mt. Cammerer Fire Tower, Great Smoky Mountains National Park," (typescript, n.d., Great Smoky Mountains National Park, Gatlinburg, TN), 4-7; Superintendent's Monthly Report, September 1939, 1.

A wooden external stair provided access to the balcony, and a narrow stone internal stair connected the store room with the upper level. Each of the eight walls on the upper story measures 7 feet 4 inches on the inside, providing room for a table, bed, stove, and fire locating equipment.²⁸⁶

Headquarters Area (Sevier County, TN). As early as July 1931 Superintendent Eakin investigated the Sugarlands area as a possible site for the park's headquarters. The Sugarlands is that portion of the valley of the West Prong of the Little Pigeon River lying from 1 to 2.5 miles south of the Gatlinburg entrance to the park. Approximately 1 mile south of the entrance, where Fighting Creek joins the West Prong, is a roughly triangular plot of relatively level land. This is also the point where the Little River Road diverges from the Newfound Gap Road. Roughly 1.5 miles farther south, where the Bullhead Branch and Big Branch join the West Prong, is an extensive meadow lying east of the river. Located just off the Newfound Gap Road and easily accessible from the Gatlinburg entrance, both portions of the Sugarlands were logical sites for development. Versions of the master plan from the 1930s provided for a park administrative area at Fighting Creek's junction with the West Prong and a "Sugarlands Developed Area" in the meadowlands just to the south.²⁸⁷

The Sugarlands Developed Area, which was never realized, was to have included a one-and-one half-story stone lodge with lounge and dining room, a bath house, 200 one- and two-room lodge cabins, 175 two- to four-room housekeeping cabins, a retail area, and an auto and trailer camp. For the park headquarters area, the 1930s master plans specified an administrative complex comprising a headquarters building and a museum building, a residential group for park staff, and a utility group.²⁸⁸ All three groups were sited west of the Newfound Gap Road, with the headquarters complex in the V created by the confluence of Fighting Creek and the West Prong, the residential area on a rise just to the northwest across Fighting Creek, and the utility group farther north on the banks of the West Prong (figure 5.9). Only the administration building, a garage building, and related roads, paths, bridges, and landscaping were completed prior to the onset of World War II.

Appropriations for the construction of the headquarters building became available only in 1938. From 1931 until 1940, the park's headquarters occupied two small frame buildings on the grounds of the now-demolished Mountain View Hotel in Gatlinburg. In 1936, the Sugarlands headquarters area was surveyed and a preliminary layout prepared. In March 1937, Chief Architect Vint and Deputy Chief Engineer Taylor visited the park and gave tentative approval to plans for the administrative area. During the 1938 construction season, CCC men graded roads, built retaining walls, and constructed water and sewer lines in the headquarters area. Stone masonry crews from the Sugarlands NP-2 CCC camp also constructed two bridges in the headquarters area. Bridge Number 1, with masonry piers and abutments and a concrete bridge deck, carries the road to the utility area over Fighting Creek. Bridge Number 2 spans Fighting Creek and the Sawmill Branch and handles traffic to the residential area. The longer span over Fighting Creek has a concrete deck and stone piers; a wing wall extends from one pier to the smaller, stone-veneered span over the Sawmill Branch, forming a continuous structure. In 1939, the CCC built water treatment structures for the headquarters area.²⁸⁹

The design of the headquarters building represented the evolving eastern expression of the NPS rustic style of architecture. While 1930s Great Smoky Mountains NP structures like comfort stations and the Mount Cammerer Fire Lookout were in the tradition of the western NPS rustic style, the headquarters building and Oconaluftee Administration Building represented a reworking of the NPS

²⁸⁶ Drawing NP-GSM 1126, "Fire Lookout Tower – White Rock," February 17, 1937.

²⁸⁷ 1937 Master Plan.

²⁸⁸ 1937 Master Plan, 1942 Master Plan.

²⁸⁹ Superintendent's Monthly Reports, March 1937, 2, February 1938, 5, March 1938, 6, April 1938, 4, September 1938, 4, August 1939, 4; 1942 Master Plan.

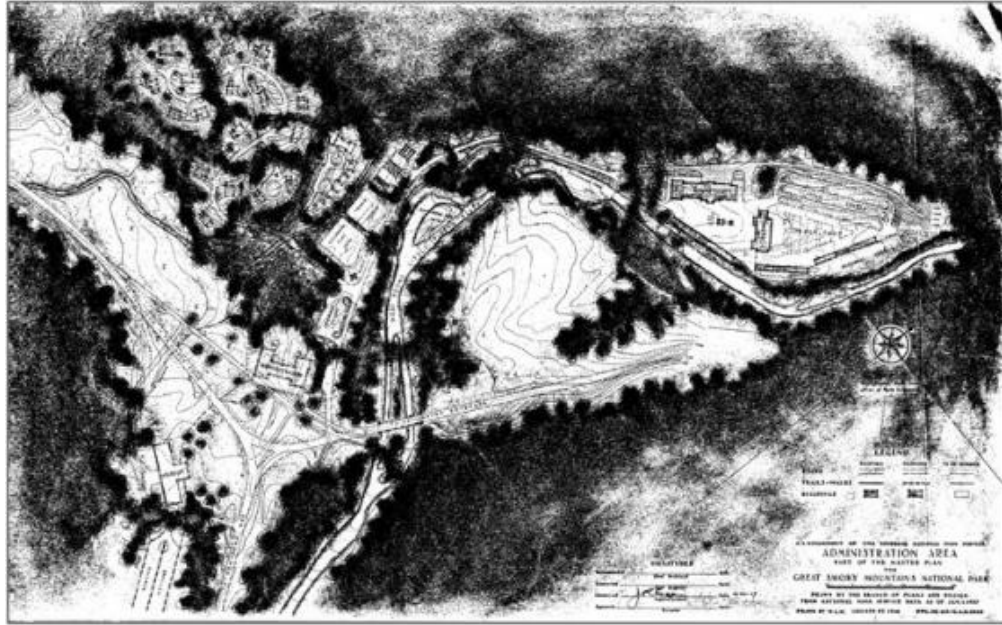


Figure 5.9. Administration Area, 1937 Master Plan (Great Smoky Mountains NP, Gatlinburg, TN).

approach to park architecture. Design sources included colonial American buildings, local Tennessee building traditions, and the continuing vogue for the Colonial Revival among architects and the public.

An early elevation of the headquarters building prepared by the Eastern Division of the Branch of Plans and Designs in March 1934 showed a residentially scaled five-part configuration reminiscent of large eighteenth-century houses in Tidewater Maryland and Virginia. A five-bay, two-story central block was connected by arcaded hyphens to front-gabled end pavilions. End-wall chimneys were present in the main block, and a central chimney appeared in each end pavilion. Sharp differences in roof height gave a decided articulation to each of the five pieces of the composition. A raised basement, the full second story, and a steeply pitched side-gable roof gave a distinct vertical emphasis to the central block. The design's biaxial symmetry, shuttered windows, and end-wall chimneys spoke strongly of the Colonial Revival. The use of unequal-coursed squared stone is probably a bow to local tradition; a number of circa-1800 stone houses survive in east Tennessee. This preliminary design was reworked substantially and refined before construction of the building began in late 1938. In a later undated elevation drawn by landscape architect Frank Mattson, the central block was reduced to one-and-one-half stories and a full-facade front porch was added.²⁹⁰

In 1938, Charles I. Barber of the Knoxville architecture firm Barber & McMurry donated his services as consulting architect on the headquarters building. Barber, the firm's principal designer, was a member of the Smoky Mountains Hiking Club (see Chapter Four for more information) and had strongly supported the park's creation. Barber & McMurry was founded in Knoxville in 1915 and built extensively throughout east Tennessee. Primarily known for residences in revival styles, the firm also designed several commercial and institutional buildings in Knoxville, such as the General Building, Church Street United Methodist Church Bank, and Young Women's Christian Association Building; numerous buildings on the University of Tennessee campus, and the rehabilitation of the Smoky Mountains Hiking Club Cabin within the park. Much of the firm's commercial work was in a

²⁹⁰ Drawing NP-GSM-1019, March 3, 1934; Drawing NP-GSM-2085.

Renaissance Revival idiom, while its residential commissions ran the gamut of revival styles from Tudor to Mediterranean.²⁹¹

The final design for the headquarters building appears in an elevation signed by Charles I. Barber on October 31, 1938, and approved by NPS Director Arno B. Cammerer on November 8, 1938. In the final version, the five-part organization and stone exterior remained, but the profile was flattened, and the hyphens and end pavilions were more tightly integrated with the central block. A great sheltering slate roof over the central story-and-one-half portion dominated the composition, extending over a full-facade front porch carried on five massive timbers. Viewed in isolation, the central block with its full porch and low-slung roof resembled an enlarged and stylized version of a pioneer cabin. Because the ridge line of the main roof rose only a few feet above the roofs of the hyphens, they read more as extensions of the central block than separate units. The end pavilions themselves were lower than in earlier designs and had lost their chimneys, serving to accentuate the horizontal and further unify the design.²⁹²

A 1938 PWA allocation of \$65,000 allowed construction of the headquarters building to begin in December 1938 using day labor. In July 1939, the NPS awarded a contract for the completion of the building to Southeastern Construction Company of Charlotte, North Carolina. Structurally, the building was reinforced concrete with a veneer of light gray quartzite quarried and cut ready for laying by CCC men at the Ravensford quarry in the park. A number of the stone masons employed by the contractor had been trained in stone work by the CCC under NPS supervision. The darker gray slate roof tiles came from Buckingham County, Virginia. Porch posts were massive squared timbers with lapped and pegged joints. The new building was occupied January 19, 1940, to the great joy of staff who had labored for years in cramped quarters outside the park boundaries in Gatlinburg.²⁹³

The headquarters building lobby was originally a nicely proportioned public reception space with a flagstone floor and paneled walls. Carpenters used local chestnut wood for the horizontal beaded boards and chair rail. At the west end of the lobby is a fireplace with a simple molded surround and mantel of chestnut. Door and window openings in each of the four walls maintained an exact symmetry. A local smith crafted four iron chandeliers for the lobby. To provide additional office space in the 1970s, the Park Service walled off a large portion of the lobby with glass and aluminum partition walls that were removed ca. 2010. Only the glass vestibule around the front doors remains.²⁹⁴

The 1930s master plans specified two ten-bay garages for the area behind the headquarters building, with the three buildings forming a U-shaped court (figure 5.10). Between the headquarters and the garages was a staff parking lot, and between the two garages was a planted island. Only the westernmost of the two garages was ever built. CCC laborers broke ground for the garage in October 1940 and completed the building the following October. The CCC devoted 3,518 man-days to the building's construction, and materials cost \$5,500.²⁹⁵

Like the headquarters building, the garage has a veneer of quartzite masonry over reinforced concrete. This simple rectangular building measures 120 feet by 25 feet and has a side-gable slate roof. Each of the ten garage bays has a paneled door with two windows. In each gable end is a single

²⁹¹ "Barber & McMurry Incorporated, A Brief History," (typescript, n.d., Great Smoky Mountains National Park, Gatlinburg, TN); "Charles Barber had his own ideas about architecture," *Knoxville News-Sentinel*, January 20, 1991; William Ross McNabb, *Architecture in Knoxville, Tennessee, 1790-1940* (Knoxville, TN: The Dulin Art Gallery, 1974), 5.

²⁹² Drawing NP-GSM-2100.

²⁹³ "Park Administration Building, Great Smoky Mountains National Park," typescript in park building files, n.d.

²⁹⁴ Jacobs, "Great Smoky Mountains National Park," 20.

²⁹⁵ Superintendent's Monthly Reports, October 1940, October 1941.



Figure 5.10. Administration Area, 1941 Master Plan (Great Smoky Mountains NP, Gatlinburg, TN).

door and an attic vent. On the back (west) side are four, six-over-nine double-hung windows. A 1991 remodeling added two shed dormers and an external concrete stair to the rear elevation.²⁹⁶

The CCC did the final grading, walks and drives, and landscaping around the headquarters area in 1940 and 1941. Before construction of the headquarters began, all vegetation had been cleared, and substantial grading was done both to aid landscape harmonization and to solve some problems posed by the terrain. As originally designed and built, a typical NPS Y intersection directly in front of the headquarters building site handled the junction of the Little River Road with Newfound Gap Road. Traffic moving north on Newfound Gap Road had a clear view of the front of the headquarters building for a considerable distance leading up to the Y. Because the headquarters site lay in a slight depression below the level of the road, grading was done to create a more pronounced dip in the lawn some distance in front of the building. Earth was then built up immediately surrounding the building to create the illusion that it sat on a slight rise. In the realized building, the first floor is at grade at the front of the building, but the basement is at grade at the back. Native trees and shrubs, primarily tulip poplar, red maple, dogwood, azalea, and rhododendron, were planted on the grounds.²⁹⁷

The headquarters area demonstrates the subtleties of NPS naturalistic design. As often was the case in the naturalistic tradition, this headquarters building exerted a strong influence over the immediately surrounding landscape. An axis running through the front door of the building organized both the alignment of the Newfound Gap Road in front and the planned service court with two garages behind the building. Viewed from a distance, the horizontally massed building seems to nestle at the foot of the two peaks that rise behind it to the north. The quarry-faced stone of the exterior, the bold chimneys, and massive posts of the porch convey a rugged sturdiness, while the symmetry and careful detailing add refinement. The quarry-faced stone blocks and heavy squared porch timbers, rather than the building's five-part massing, link the headquarters to local architectural traditions. The stonework suggests the minimal dressing but careful masonry employed in East Tennessee stone houses of 1780 to 1820. Especially when illuminated by raking sunlight, the

²⁹⁶ Drawing NP-GSM 2008-B, "Garages for Government Autos," April 17, 1940.

²⁹⁷ Superintendent's Monthly Reports, March 1940, 3-4, June 1940, 1, January 1941, 2, May 1941, 3; "Park Administration Building, Great Smoky Mountains National Park."

stone walls display a pleasingly rough texture suitable to the grandeur of the Smoky Mountains. The plantings of native trees and shrubs help marry the building to the landscape.

Oconaluftee Administration Building (North Carolina Headquarters) (Swain County, NC).

Although the main park headquarters was assigned to the Tennessee side of the park, an administrative presence near the North Carolina entrance was also necessary. Park planners considered Smokemont, Mingus Creek, and Floyd Bottoms as possible sites for the North Carolina headquarters, or secondary administration area. Near the confluence of Raven Fork Creek with the Oconaluftee River, the valley of the Oconaluftee broadens, forming an area named Floyd Bottoms for the family that once farmed there. Mingus Creek enters the Oconaluftee from the west in the northern portion of Floyd Bottoms, forming another reasonably level valley suitable for development. Smokemont is 3 miles farther north in the Oconaluftee Valley and had already been selected for campsite development. All three sites were easily accessible from Newfound Gap Road. The NPS ultimately chose Floyd Bottoms, probably because it was closest to the North Carolina park entrance and near the proposed terminus of the Blue Ridge Parkway.

As envisioned in the 1930s versions of the master plan, the North Carolina headquarters was to have included an administrative group comprising an administration building/ranger station and a museum building, a residential group, and a utility group. When the Floyd Bottoms site was selected, the administration building was sited between Newfound Gap Road to the west and the Oconaluftee to the east (figure 5.11). The front of the building looked south across a large field that had been part of the Floyd farm; the large Floyd barn remained on the property some 100 yards to the southeast. The museum was proposed initially for Mingus Creek and later for a site on the west side of Newfound Gap Road south of the administration building. The residential and utility areas were east of the Oconaluftee, northeast of the administration building. Only the Oconaluftee Administration Building and related parking areas were completed prior to World War II.²⁹⁸

In design, the administration building closely resembled the central block of the Sugarlands headquarters with a rear ell added. The similarity of the two buildings is unremarkable, considering that architect Charles I. Barber consulted on both. A November 22, 1938, sketch showing two perspective views and a floor plan of the administration building is signed by A. J. Higgins and carries an "O.K." from C. I. B., almost certainly Barber. This sketch shows the building essentially in its built form. Barber reviewed a set of plans in March 1939, and the final set of construction drawings was approved in July 1939.²⁹⁹

Like the Sugarlands headquarters, the Oconaluftee Administration Building is a residentially scaled building employing local materials. It uses the same quartzite stone veneer over concrete and features a full-facade front porch carried on six posts. Motorists entering the park from the Cherokee side once had an unobstructed view of the building, which faces south, from across Floyd Bottoms. The main block has a gently sloping side-gabled roof and end-wall chimneys; the rear ell is also gable-roofed. On the west, where the rear ell meets the main block, is a shed-roofed side porch. Although the original plans specified a slate roof, wood shingles were the initial roofing material, possibly because the NPS rushed construction to give the building a finished exterior appearance in time for the park's dedication in September 1940. Slate tiles replaced the shingles in 1955. The

²⁹⁸ Master Plan, n.d. [1935-1936?]; Drawing NP-GSM-2165-B, 1942.

²⁹⁹ Drawing NP-GSM 2100B, "Secondary Adm. Bldg., Mingus Creek," November 22, 1938; Drawing NP-GSM 2100-E (17 sheets), "Secondary Administration Bldg." July 29, 1939; "Final Report on the Construction of the Secondary Administration Building, Great Smoky Mountains National Park at Mingus Creek, North Carolina," Typescript, n.d., Park Maintenance Files, 2.

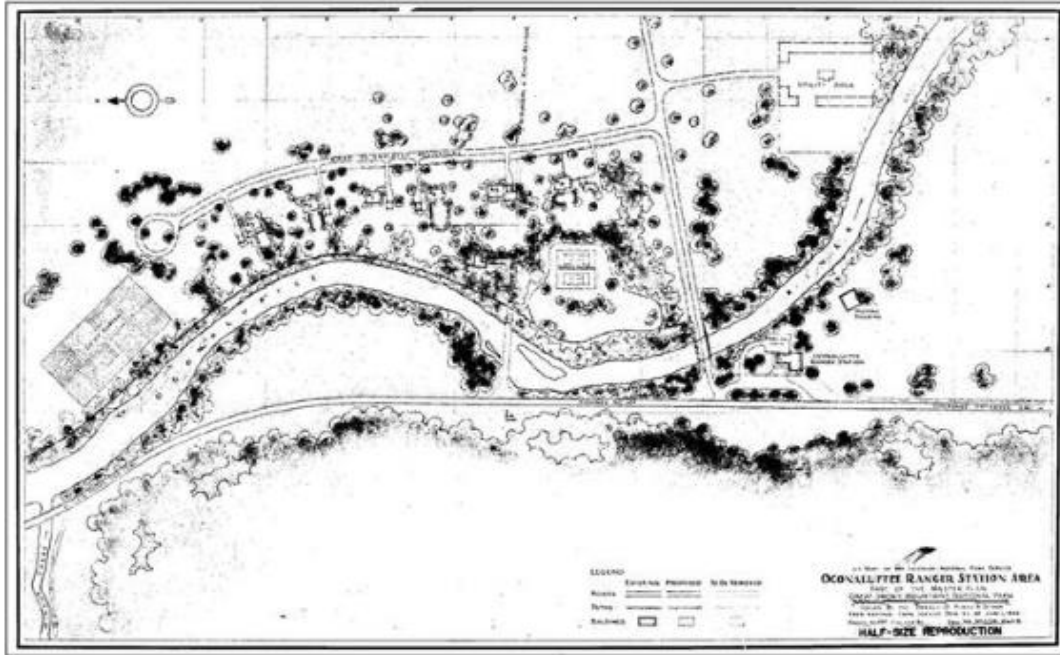


Figure 5.11. Oconaluftee Ranger Station (Administration Building) Area. Drawing NP-GSM 2165B (Great Smoky Mountains NP, Gatlinburg, TN).

porches are carried on massive squared and chamfered chestnut posts fitted with knee braces and left unpainted. Flooring for both porches is Tennessee crab orchard flagstone.³⁰⁰

The ground in front of and to the west of the building is nearly level, while the grade drops away approximately 8 feet at the east toward the river. This means that the first floor is at grade on the south and west, while the basement is at grade on the east. A stone retaining wall running from the east elevation of the building and terraces and stone steps at the north end help to mediate the grade change. Two stone drinking fountains, similar to those at Smokemont, are present at the north side of the administration building.³⁰¹

The main, southern, portion of the building originally housed a 22-by-41-foot lobby/visitor contact area (now an open meeting space) and the chief ranger's office. Both rooms have end-wall fireplaces veneered with quartzite masonry, and the flagstone pavers of the front porch continue into the lobby. Chestnut timbers and paneling are used throughout these spaces. The roof framing of the lobby is exposed and consists of chestnut beams, rafters, kingposts, and braces, all hand squared and chamfered. The office has a ceiling of chestnut panels. Other offices were housed in the rear ell, which remains divided into offices. The full basement is devoted to restrooms, the heating system, and storage areas. The attic, originally an unfinished storage area, has been partially converted to offices.³⁰²

A 1938 PWA allotment included \$18,000 for construction materials for the administration building, and PWA crews began work on the building in December 1938. In January 1939, full CCC participation in the project was authorized, and PWA labor was phased out. CCC involvement included quarrying and transporting stone for exterior walls from the nearby Ravensford quarry,

³⁰⁰ Ruthanne L. Mitchell and Rene Cote, *Historic Structure Report: Oconaluftee Ranger Station/Visitor Center, Swain County, North Carolina, Great Smoky Mountains National Park* (Atlanta, GA: Southeast Regional Office, National Park Service, 1990), 10, 12.

³⁰¹ Drawing NP-GSM 2100-E; Drawing NP-GSM 2198, "Grading Plan-Secondary Administration Building," September 11, 1939.

³⁰² Drawing NP-GSM 2100-E (17 sheets), "Secondary Administration Bldg.," revised July 29, 1939.

carpentry, and masonry. A few locally hired axe men hewed the timbers for the porches and lobby. Carpenters from CCC camp NP-4 (some of whom transferred to camp NP-5 when NP-4 was abandoned) worked on the building in the summer of 1939. By December 1939, the stone masons from camp NP-2 who had built the Sugarlands headquarters were at work on the administration building. After a number of construction delays caused by cold weather and the lack of detailed plans, rangers occupied the building November 25, 1940.³⁰³

Following the building's completion, CCC men finished grading, landscaping, and construction of parking areas. The original public parking area is along the building's west side, separated from the highway by a 40-foot-by-240-foot, lozenge-shaped landscaped island (figure 5.12). A driveway leads from the north end of this parking area to an employee parking lot on the east side of the building. To accommodate the grade change, a stone retaining wall extends from the northeast corner of the building at the south end of the employee parking lot. The CCC built flagstone walks around the administration building and two flights of flagstone steps from the main parking area to the employee parking lot below. A flagstaff was erected directly in front of the building, on axis with the front door. CCC-era plantings were limited to scattered maples, oaks, and dogwoods in the immediate area of the building.³⁰⁴

In the 1970s, the NPS constructed a new visitor parking area south of the administration building to supplement the lot on the west side of the building. In 2010, a visitor center/museum and a comfort station were built south of the administration building, at the east end of the expanded 1970s parking

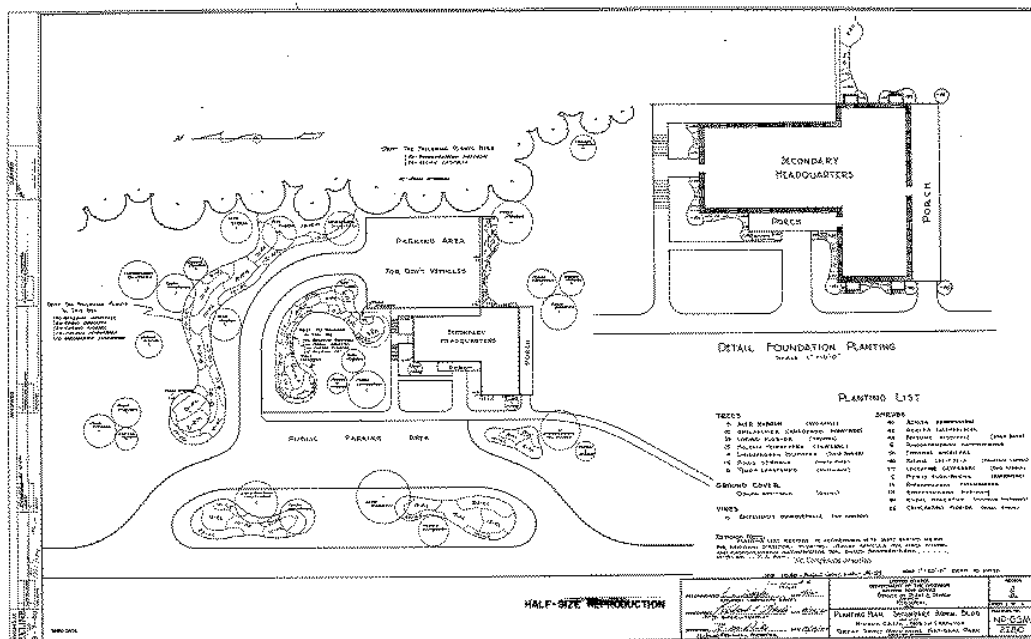


Figure 5.12. Planting Plan, Oconaluftee Ranger Station. Drawing GRSM 133-2280 (NPS Technical Information Center, Denver, CO).

³⁰³ Superintendent's Monthly Reports, October 1938, 1; November 1940, 1; "Final Report on Construction of the Secondary Administration Building," 1-4.

³⁰⁴ Superintendent's Monthly Report, July 1942.

area, and the flagstaff was relocated closer to the new visitor center. Some changes have been made in the paving of the sidewalks surrounding the administration building. The configuration and stone curbing of the original parking lot, west of the building, appear to be unaltered.

The Oconaluftee Administration Building successfully blends into its surroundings. Because it lacks the five-part organization of the Sugarlands Headquarters Building and features unpainted wood porch posts, the administration building more nearly resembles an enlarged and slightly formalized version of a mountain cabin. As a building subsidiary in importance to the park headquarters, the Oconaluftee Administration Building is somewhat less formal, and it does not order the surrounding landscape by an extension of lines from the building outward in the way that the headquarters building does. However, it is linked by walkways to the new visitor center complex to the south. Native species, such as rhododendron, tulip poplar, red maple, and white pine, are planted around the administration building, aiding the cause of landscape harmonization.

Fish Hatcheries/Kephart Prong Fish Hatchery (Swain County, NC). In 1935 and 1936, the U.S. Bureau of Fisheries built a fish hatchery complex at the point where Kephart Prong enters the Oconaluftee River on the North Carolina side of the park. Sited in the V of land between the two rivers, the facility was reached by a short access road from the Newfound Gap Road. The WPA funded construction of four buildings—the hatchery, a workshop, a residence, and a garage—and CCC men built sixteen circular and six rectangular fish-rearing pools and graded and planted the 10-acre site. The hatchery suspended operations in 1948, and all traces of this installation are now gone. Surviving photographs show wooden, gable-roofed buildings and stone-rimmed rearing pools. The hatchery had an annual capacity of 250,000 rainbow and eastern brook trout, which were released to park streams. In December 1939, the CCC began work on footings for a new concrete bridge to carry the hatchery access road across the Oconaluftee River. Work on this bridge was suspended when the CCC program ended in July 1942 and never resumed.³⁰⁵

Appalachian Trail Shelters. The 1937 Master Plan proposed building seven shelters along the Appalachian Trail, which runs for 71 miles through the park.³⁰⁶ Subsequent versions of the plan called for eight, the number ultimately built. All were variants of the Adirondack shelter described by Albert Good as having originated in New York State. The Adirondack shelter is a three-sided, gable-roofed structure, typically made of logs or planks. Shelters in the Smokies were of either notched round-log construction or log-framed with vertical plank siding and log rafters and purlins (figures 5.13 and 5.14). Hand-riven plank siding was specified for sites where logs of 10 inch or greater diameter were scarce. Interior dimensions of both types were 15 by 10.5 feet. Between the summer of 1938 and the summer of 1940, the CCC built eight shelters at approximately 9-mile intervals on the trail. These structures were an almost perfect expression of the NPS rustic style: the shelters were constructed of timber felled nearby and minimally worked with hand tools. In the 1950s, a number of these original shelters burned, and all were replaced over several years in the 1960s by more durable stone and metal shelters. The Smoky Mountains Hiking Club completed a multi-year rehabilitation of the existing trail shelters in 2013. The work varied from site to site but included the addition of a large overhang to the front of each shelter and a smaller covered cooking area to one side as well as the installation of new roofs.³⁰⁷

³⁰⁵ Superintendent's Monthly Reports, December 1939, 3, July 1942, 4; Superintendent's Annual Reports, 1936, 6, 1937, 6, 18; Drawing NP-GRSM-2168-A, "Kephart Developed Area," 1942.

³⁰⁶ The trail itself will be listed in the National Register under a forthcoming Multiple Property Documentation Form (MPDF) and is, thus, not addressed in this HRS. The existing trail shelters should be evaluated as a property type in the future nomination of the park trail segments under the MPDF. A brief summary of their construction history is provided here.

³⁰⁷ Superintendent's Monthly Reports, September 1938, 4, July 1939, August 1940; 1937 Master Plan, 1938 Master Plan; Drawing NP-GRSM-2065, "Trailside Lean-To - Log Type," 1935; Drawing NP-GRSM-2066, "Trailside Lean-To, Log Frame Type," 1935; Good, *Park and Recreation Structures*, 87-88.

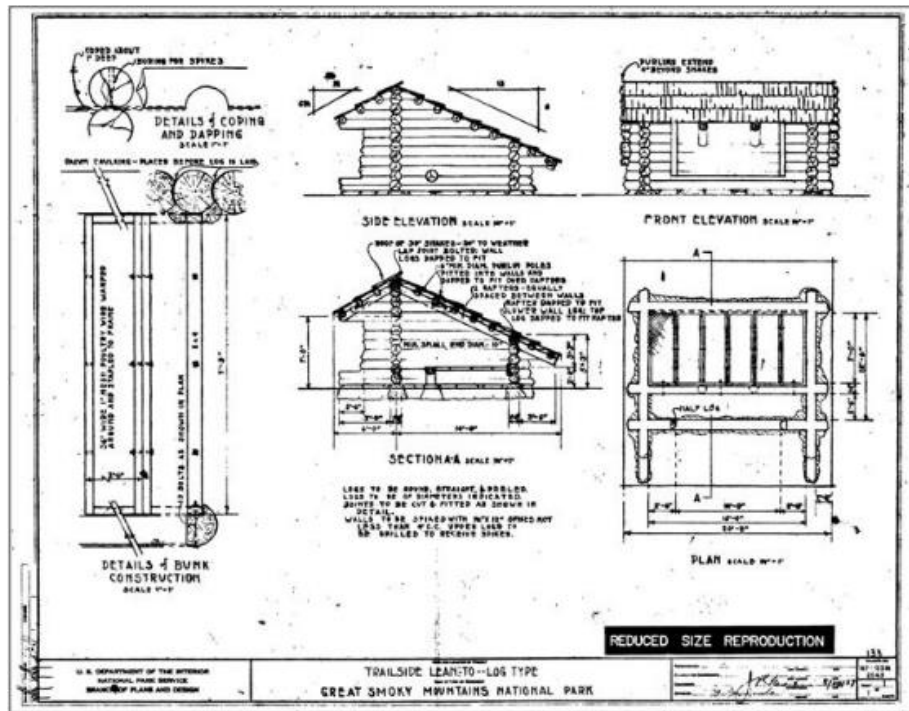


Figure 5.13. Trailside Lean-To – Log Type. Drawing NP-GSM 2065 (Great Smoky Mountains NP, Gatlinburg, TN).

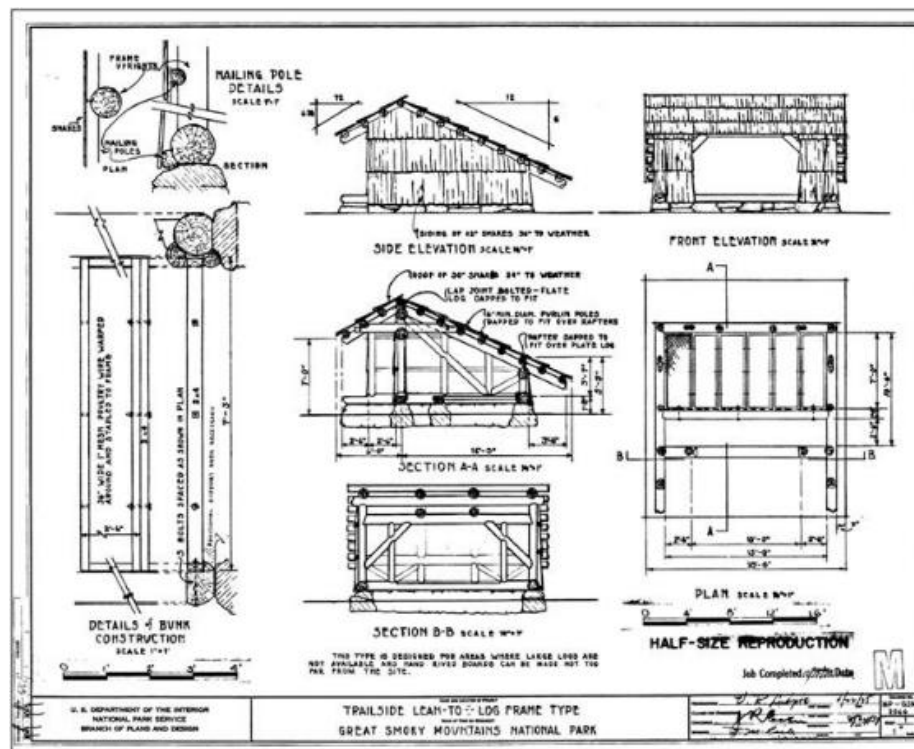


Figure 5.14. Trailside Lean-To – Log Frame Type. Drawing NP-GSM 2066 (Great Smoky Mountains NP, Gatlinburg, TN).

Known Resource Types

The following major resource types associated with the development of Great Smoky Mountains NP from 1926 to 1942 have been identified: motor roads, overlooks, fire towers, campgrounds, and administrative/visitor contact areas. Each major resource type subsumes a number of subsidiary resources, as described below. Trees, understory shrubs, ground cover, and lawns are integral parts of the landscapes of these resources. Where appropriate, these features are discussed. Further study and evaluation of these resource types as cultural landscapes should be undertaken by qualified historical landscape architects.

Roads.³⁰⁸ This resource type covers the motor roads making up the circulation system of the park that reflect the principles of naturalistic design developed by NPS landscape architects and engineers. It includes the major park roads designed to provide entry to the park and access to the park's scenic features and recreational areas. These roads connect other components of the park—campgrounds, pull-offs and overlook areas, and administrative and visitor contact areas—described below. In addition to the roads and road banks, the resource type encompasses such associated features as bridges; culverts and drains; tunnels; guardrail and barriers; tree wells; and pull-offs, including curbing, retaining walls, and sidewalks.

Overlooks. This resource type covers overlooks consisting of minor roads, parking areas, trails, paths, bridges, benches, and other facilities, developed for the purpose of presenting scenic views to visitors. It includes any related parking plazas, comfort stations, retaining walls, sidewalks, and memorials.

Fire Controls. This resource type corresponds to structures erected for the purpose of monitoring fire activity within the park. It includes lookout towers as well as living quarters constructed for fire lookouts.

Campgrounds. This resource type covers campgrounds developed within the park by NPS designers according to nationally recognized principles of campground planning. It includes related loop roads, campsites with parking spurs, comfort stations, and drinking fountains.

Administrative/Visitor Contact Areas. This resource type identifies the areas within the park designed to provide essential administrative and visitor facilities. It includes headquarters and administration buildings; ranger stations; circulatory roads and associated features; parking areas, including curbing; sidewalks; and garages.

The park landscape as a whole represents the efforts of the federal government, two states, and conservation advocates to establish and develop this major eastern park.

The resource types listed above are eligible for listing in the National Register under Criterion C because they embody the distinctive design philosophy and qualities of craftsmanship perfected by the NPS in the New Deal period. They are also eligible under Criterion A because they represent the efforts of conservationists, state officials, Congress, and the Roosevelt Administration to revive the economy through public works while also conserving natural resources and providing recreational opportunities to the American people.

³⁰⁸ Although a complete evaluation of all roads and trails within the park is beyond the scope of this HRS, major roads associated with the park development contexts are addressed. Primary components of other resource types, such as campground loop roads, are also addressed within the discussions of the associated resource.

To qualify for National Register listing under this context, resources must be associated with the initial development campaign at the park as outlined in this chapter and have been constructed during the 1933 to 1942 period in accordance with the park's master plan. If constructed after 1942, the resource must be congruent in design and execution with work from the earlier period and must be a logical extension of the original development campaign. Resources must adhere to the NPS design philosophy prevalent in the 1933 to 1942 period that emphasized visual and cultural harmonization. Particular consideration should be given to the character-defining elements of spatial organization, circulation, and vegetation. Resources should retain most, if not all, aspects of integrity. Roads that have been widened and resurfaced may be eligible if they maintain their original alignments and bank treatment and provide the same sequence of visual experiences as when first constructed.

CHAPTER SIX: EARLY NATIONAL PARK SERVICE PRESERVATION PHILOSOPHY, CA. 1930–1960

This context discusses the historic resources within Great Smoky Mountains NP that represent the historic preservation philosophy of the National Park Service (NPS) from the years between ca. 1930 and ca. 1960. The historic preservation program established at Great Smoky Mountains NP during its initial development and implemented between 1926 and 1959 rationalized the relocation and reconstruction of settlement-period buildings and structures as a method of interpreting the region's mountain culture through the creation of outdoor field museums. Many of the pioneer buildings and structures within the park, including some that have been moved, have been nominated to the National Register for their architectural significance. Resources restored and/or reconstructed on their original sites are also evaluated under the settlement-period context in Chapter Two. Moved resources that lack integrity under the settlement-period context may still be considered eligible under the preservation context described in this chapter.

HISTORIC PRESERVATION IN THE UNITED STATES, 1930–1960

The NPS developed its approach to managing extant cultural resources at Great Smoky Mountains NP during the initial park development period (1926–1942), which coincided with the agency's full-fledged entrance into historic site management. The same general approach continued to be used for post-World War II preservation projects at the park. Pragmatic considerations factored heavily in the decisions made, but the over-arching historic preservation principles put in place at the national level guided park management to some extent as well. These principles drew on national trends in the preservation and interpretation of historic resources, in particular the precedents set by Colonial Williamsburg and other outdoor museums established in the 1930s and 1940s and the prevailing "pioneer myth" of the 1930s.

Colonial Williamsburg's Influence

Before the physical restoration of eighteenth-century Williamsburg, Virginia, in the 1920s and 1930s, historic preservation in the United States remained largely in the local sphere, with small private organizations raising funds to save individual buildings as needed. The Reverend W.A.R. Goodwin took on a project of much greater magnitude when he embarked on his creation of an outdoor museum of Colonial American history at Williamsburg that ultimately involved the restoration and reconstruction of over 500 Colonial-period buildings alongside the demolition of over 700 buildings that post-dated 1790. Goodwin's cultivation of John D. Rockefeller, Jr., as the wealthy benefactor of his Colonial Williamsburg project pushed preservation into the realm of private philanthropy on a much broader scale and expanded the scope of preservation's potential. By the time the first phase of the Williamsburg restoration opened to the public in 1934, the site was firmly established as a cultural force that demonstrated the value of preserving one image of the past as an educational experience for the present.³⁰⁹

Reverend Goodwin first elucidated his vision for Williamsburg in a book he published soon after supervising the restoration of the city's historic Bruton Parish Church in 1907. When he returned to the area in February 1923, he began recruiting possible collaborators from the financial and technical

³⁰⁹ Richard Handler and Eric Gable, *The New History in an Old Museum: Creating the Past at Colonial Williamsburg* (Durham, NC: Duke University Press, 1997), 31; Charles B. Hosmer, *Preservation Comes of Age, Volume I* (Charlottesville, VA: University Press of Virginia, 1981), 11, 65.

spheres, including Henry Ford's son Edsel and brother William as well as Rockefeller, Jr. When Rockefeller authorized Goodwin to hire an architect to draw up a restoration plan, the latter worked closely with William Perry from the noted Boston firm of Perry, Shaw & Hepburn to produce a wealth of thoroughly researched and detailed materials that convinced Rockefeller of the project's worth. Rockefeller gradually expanded his investment in Goodwin's plans, with continued review by experts in various fields. As the work progressed, those involved encountered numerous challenges and issues related to questions of preservation ideology as well as practical questions of construction and authenticity. One of the most publicized examples was the conflict over how to develop the site of the Capitol building, where old foundations existed. To address such issues, Perry and Goodwin consulted key figures in historic preservation and architectural history, such as Fiske Kimball and A. Lawrence Kocher. The project organizers also created an advisory commission that included the most highly regarded architectural scholars of the time to review the entire process and draft restoration guidelines. Perry ultimately published his own report on the project in which he outlined his ten guiding principles for historic restoration work. The sheer volume of research done to support the project resulted in the development of a clearinghouse for all preservation-related information at Williamsburg. Kenneth Chorley, president of the Colonial Williamsburg foundation from 1935 through 1958, visited preservation groups across the country to publicize the restoration and to advise others interested in undertaking similar ventures.³¹⁰

Colonial Williamsburg has generally been viewed as setting the standard for subsequent projects of its kind and establishing a prototype for the American historic outdoor museum. The key components of other privately funded as well as government-financed preservation work stemmed directly from key components of the Williamsburg project. These included the establishment of a strong research foundation for historic restorations and reconstructions through the assistance of expert consultants, along with a professional bias toward evaluations based on architectural merit. In the late 1920s, most professional historians focused primarily on documents rather than buildings and tended to distance themselves from historic preservation work and public history. Other professionals like landscape architects, archeologists, and contractors also had not yet looked at historic buildings as a possible area of research. Consequently, architects and architectural historians well-versed in historical revivalism strongly influenced the direction of historic preservation in the early years of its evolution as a professional field, and other historians only later entered the conversation more fully.³¹¹ This architectural orientation manifested itself at Williamsburg in a greater initial focus on architectural considerations than on questions of historical interpretation. Williamsburg's success in attracting visitors to the restored city streets also popularized the trend of preserving and grouping buildings as interpretive tools and relying on nostalgia to appeal to public sentiment. Goodwin's work established a clear precedent for the reconstruction of lost buildings as well, demonstrating that the past could be re-created to suit any program. On a practical level, Goodwin also introduced the concept of employing lifetime leases as a development tool to enable restoration work to occur in active, as well as vacant, neighborhoods.³¹²

Outdoor Museums of the 1930s and 1940s

Despite Williamsburg's popular success as a tourist attraction, criticisms of the site when it first opened included its "neatness and newness" as well as its static nature, lacking in any attempts to bring the city's history to life for visitors.³¹³ Later phases of the work at Colonial Williamsburg introduced shops with skilled tradesmen working at 18th century crafts to interpret the meticulously restored streetscapes for the crowds of visitors. However, the Williamsburg project

³¹⁰ Hosmer, *Preservation Comes of Age, Volume I*, 12-64.

³¹¹ Denise D. Meringolo, *Museums, Monuments, and National Parks: Toward a New Genealogy of Public History* (Amherst, MA: University of Massachusetts Press, 2012), 94-95.

³¹² Hosmer, *Preservation Comes of Age, Volume I*, 12-64.

³¹³ Hosmer, *Preservation Comes of Age, Volume I*, 54.

remained more committed to authentic restoration as its primary goal, as reflected in statements by Kenneth Chorley regarding his concern about the inaccuracy of the buildings at Henry Ford's outdoor museum in Dearborn, Michigan.³¹⁴

American automotive entrepreneur Henry Ford opened Greenfield Village in 1929 in direct contrast to the development underway at Williamsburg. Ford imitated Goodwin's overall concept of using restored historic buildings to re-create the past and create an educational forum. However, the direct model for his museum came from farther afield, at Skansen in Stockholm, Sweden. One of the world's first open-air museums, Artur Hazelius founded Skansen in 1891, moving about 150 furnished houses and farmsteads from across the country to the site where he created a "miniature historical Sweden" composed of traditional culture exhibits that include cultivated plots and gardens and domestic and wild animals.³¹⁵ At Greenfield Village, Ford collected nearly 100 buildings from the 17th century to the present and arranged them in a village setting that he presented as "an animated textbook" of American history. The village also included some reconstructions of significant historic buildings, such as a replica of Thomas Edison's laboratory complex in Menlo Park, New Jersey. Like Rockefeller, Ford relied on experts for advice, but overall he was less concerned about the architectural authenticity of his restorations.³¹⁶

Other outdoor museums established after Williamsburg started from the same fundamental basis that historic building groups could serve as interpretive tools but adjusted the formula to adapt it to other circumstances. In most cases, the developers did not start with an existing historic community as at Williamsburg but instead created a synthetic museum setting on a more or less blank slate along the lines of Greenfield Village. Businessman Stephen C. Clark specifically intended his project in Cooperstown, New York, not as "another Williamsburg" but as a demonstration of "the life of village farmers in and around Otsego County in the early 1800s."³¹⁷ The Farmer's Museum he opened there in 1944 included a re-creation of a village crossroads assembled as a collection of buildings relocated from other rural communities around New York State and a working farmstead complex. At Old Sturbridge Village in Massachusetts, which opened in 1946, businessman and antique collector Albert Wells created a reconstruction of a New England industrial community on a former mill site. Wells' goal was to establish a "living museum where the arts and industries of early rural New England will be preserved and taught anew...will not pretend...to be a finely accurate reconstruction or restoration."³¹⁸ Notably, Wells engaged the principal landscape architect involved with the Williamsburg restoration, Arthur A. Shurcliff, to design the Sturbridge village green, manipulating the site to suit his vision in such a way as a playwright might hire a set designer to create a scene for a particular production.

The wealthy philanthropists behind the Cooperstown and Sturbridge projects saw the educational value in a cohesive grouping of buildings as superseding any concerns over integrity of location. Like Ford, they were less concerned with authenticity than with creating a suitable backdrop for their particular, highly selective view of history. However, often the relocation of a historic building in the service of the museum's primary educational objective also resulted in the beneficial effect of saving it from demolition. Beginning with their purchase of the Deerfield Inn in the early 1940s, the Flynt family restored a number of buildings on their original sites along Main Street in Deerfield, Massachusetts, in an effort to preserve the quaint New England atmosphere of the town and protect it from new development. They also moved in several buildings from nearby towns that were threatened with demolition, ultimately creating a composite outdoor museum of houses dating from

³¹⁴ Hosmer, *Preservation Comes of Age*, Volume I, 77-78.

³¹⁵ "About Skansen," accessed September 24, 2013, <http://www.skansen.se/en/artikel/about-skansen-0>.

³¹⁶ Hosmer, *Preservation Comes of Age*, Volume I, 78-80.

³¹⁷ Hosmer, *Preservation Comes of Age*, Volume I, 104.

³¹⁸ Hosmer, *Preservation Comes of Age*, Volume I, 114.

1730 to 1850. By 1949, plans involving re-created groupings of restored historic buildings were underway for similar outdoor museums in Mystic, Connecticut, Plymouth, Massachusetts, and Shelburne, Vermont, demonstrating the enduring popularity of the Colonial Williamsburg and Greenfield Village models.³¹⁹

The Myth of the Pioneer in American History

Sites like Greenfield Village and the Farmers' Museum presented nostalgic versions of history in part because these stories appealed to Americans in the first half of the twentieth century. The onset of public fascination with the nation's past occurred during the post-Civil War years, when the Colonial Revival movement inspired antique collecting, historical pageantry, reproduction furniture, period rooms, historic house museums, and architecture. Hereditary and patriotic organizations formed to assert the importance of tradition in reaction to a rapidly changing society. The cultural climate of the Progressive Era continued to espouse traditional values within a framework of reform that surged to the forefront after the Great Depression. National intellectual trends during the New Deal years emphasized regionalism, folklore, the idealization of our agrarian past, and nostalgia for self-reliant communities. Interdisciplinary efforts to document "authentic and indigenous ways of life in isolated corners of America" included many of the federal work programs implemented during this period, such as the Historic American Buildings Survey (HABS) project that documented buildings erected prior to 1860, the Farm Security Administration that photographed family farms throughout the country, and the Federal Writers' Project that gathered folktales and oral histories from former slaves, farmers, and workers.³²⁰ In 1936, *National Geographic* observed that the traditional mountain folkways added "'human interest' to scenic beauty."³²¹

Likewise, a sentimental and admiring, while simultaneously condescending and interventionist, perspective shaped much of the contemporary popular images of the cultural history of Southern Appalachia. Commentators in the late nineteenth and early twentieth century tended to exaggerate Appalachian residents' isolation from mainstream culture and emphasize the survival of archaic language, music, and crafts among their communities. Local colorists, such as Mary Noailles Murfree and Horace Kephart, depicted the region's culture in fiction and brought national recognition to the area. Murfree visited Cades Cove in the 1870s and wrote novels based on her highly romanticized impressions of the people, while other writers in the 1880s depicted their lives as brutal and desperate. Kephart, an early advocate for the development of a national park in the Smokies, published his own romanticized views of mountain life and customs in the 1906 *Camping and Woodcraft* and the 1913 national bestseller *Our Southern Highlanders*. He and others idealized the mountaineers as the last vestige of America unspoiled by industrialization, urbanization, and immigration, according them the status of folk heroes.³²²

Settlement workers and home missionaries also encouraged the myth of the pioneer. Pi Beta Phi Settlement School, Gatlinburg, founded by the PBP Fraternity for Women in 1912, aimed to provide better education and health care for Appalachian children as well as to preserve native handicrafts. In 1929, representatives of several groups in the area, including Pi Beta Phi and six other centers for handicraft production, combined to form the Southern Mountain Handicraft Guild, now the Southern Highland Craft Guild, for the purpose of fostering handicrafts and preserving old crafts in danger of disappearing.³²³

³¹⁹ Hosmer, *Preservation Comes of Age*, Volume I, 123-131.

³²⁰ Meringolo, *Museums, Monuments, and National Parks*, 118-120.

³²¹ Roy, "Rambling Around the Roof of Eastern America," 244.

³²² Catton, *A Gift for All Time*, 252; Dunn, *Cades Cove*: xiii-xiv; Pierce, *The Great Smokies*, 21.

³²³ Catton, *A Gift for All Time*, 252-253.

Historic Sites in the National Park System

Developments in the national park system in the late 1920s and early 1930s contributed to the shaping of the federal government's perspective on historic preservation. Not long after the establishment of Great Smoky Mountains NP as one of three new eastern parks in 1926, the NPS expanded its purview to encompass sites considered significant primarily for their historical associations rather than their natural scenic qualities. Discussions on the expansion of the NPS's oversight to include historic properties began under the first director Stephen Mather, but it was Mather's successor, Horace Albright, who led the agency "heavily into the historical park field" with the acquisition of George Washington's Virginia birthplace in 1930.³²⁴ Within the next three years, Congress authorized the creation of two more historical parks, Colonial National Monument in July 1930 (re-designated a National Historical Park in 1936) and Morristown National Historical Park in March 1933.

In developing a management framework for these new types of parks during his four years as NPS Director, Albright relied on the recommendations of a 1929 report authored by the ethnologist Clark Wissler for the NPS's Committee on Educational Problems in the National Parks. Wissler removed the distinctions between scientific and historical sites implied by the language of the Antiquities Act. His enunciation of the historical qualities of monuments in the American Southwest helped justify the establishment of historical monuments in the East and brought attention to the need for an explanatory narrative at a high level based on input from various professions.³²⁵ Guided by Wissler's ideas, Albright created a historical division within the Branch of Research and Education and hired Verne E. Chatelain in 1931 as the first NPS historian. Chatelain's pioneering efforts in research, preservation, and interpretation at the Service's first three historical sites laid the foundations for the agency's historical program. In its re-creations of historic landscapes and buildings at George Washington Birthplace National Monument, Colonial National Monument, and Morristown National Historical Park, the NPS explored the relatively new field of historical restoration during the same years as the initial phase of work at Colonial Williamsburg occurred. Albright worked closely with the leadership at Colonial Williamsburg, particularly with respect to the adjacent Colonial National Monument, and encouraged a cooperative dialogue among the key figures involved in the publicly and privately funded projects.³²⁶ Through these relationships, the NPS benefited from the management expertise of men like W.A.R. Goodwin and Kenneth Chorley and the technical restoration experience of numerous architects, as well as the patronage of John D. Rockefeller, Jr., who strongly supported the federal government's historic preservation programs.

Director Albright resigned from the NPS in August 1933 after engineering President Franklin D. Roosevelt's transfer of all national monuments to the agency's oversight, thereby quadrupling the number of historical areas within its purview and adding urgency to the need for clear preservation and restoration guidelines. Chatelain subsequently pleaded for better-quality restoration work based on thorough research and supervised by trained personnel. The 1935 Historic Sites Act, which mandated the development of museums and educational programs for historic site interpretation, also provided for a comprehensive research program within the NPS. Once again, Colonial Williamsburg's precedent played an important role in the development of federal preservation policies, as Kenneth Chorley and his staff actively lobbied for the 1935 legislation, which was drafted by Rockefeller, Jr.'s lawyer. The NPS established its first clear restoration policy on May 19, 1937. Subsequent years saw a rapid expansion in federal historic preservation activities throughout the

³²⁴ Albright, December 20, 1928, quoted in Hosmer, *Preservation Comes of Age, Volume I*, 475–476.

³²⁵ Meringolo, *Museums, Monuments, and National Parks*, 92–96.

³²⁶ Hosmer, *Preservation Comes of Age, Volume I*, 493–509.

national park system. As discussed in Chapter Five, New Deal programs such as the CCC substantially assisted the NPS with its expanded mission.³²⁷

The earliest outdoor museums established in national parks included a replica Indian village created in the mid-1930s in Yosemite and the Pierce Mill in Rock Creek Park restored as a working grist mill in 1936. The noted restoration architect Charles E. Peterson worked on the latter project. Peterson, a landscape architect in the Eastern Division of the Branch of Plans and Design, oversaw the design of site improvements at Yorktown and George Washington's Birthplace, as well as the planning of the Colonial Parkway between Yorktown and Williamsburg. Based on his experiences, Peterson submitted a proposal in 1933 to the NPS to develop the Historic American Buildings Survey (HABS), a significant contribution to restoration scholarship. During his 33-year tenure with the NPS, Peterson became the agency's lead restoration and reconstruction planner and a staunch advocate for careful and thorough training in architectural restoration techniques. When he toured Greenfield Village in the fall of 1936, he expressed his concern about the lack of professional assistance and detailed restoration records, elements he considered key components of any authentic historic restoration.³²⁸ Peterson's perspective on restoration work was also informed, however, by the Colonial Williamsburg model of a holistic tourist experience constructed by landscape architects and engineers, which can be seen in many of the scripted historic landscapes created in the national parks.³²⁹

The beginning of World War II initiated a halt in the federal government's participation in historic preservation that continued for about 10 years. Quasi-government and private non-profit organizations formed to fill the gap left by the withdrawal of federal support. In April 1947, the National Council for Historic Sites and Buildings organized to "further the preservation, study, and interpretation—of historic sites and buildings situated in the United States and its possessions and significant for American history and culture." In May 1950, the National Trust for Historic Preservation organized to supplement on a national scale the work of the NPS in holding intact sites, buildings, and other objects of historical significance. Within the park system, management during this period focused primarily on preventing and arresting the deterioration of those historic and prehistoric structures already within their custodianship that were increasingly subjected to visitor use. Travel to all areas administered by the NPS set new records in each of the first years after World War II, exacerbating problems already faced by park management. Even in 1941, campgrounds were overcrowded, roads needed upgrading to accommodate traffic loads, and utility systems were taxed. With the 1952 numbers almost twice that of 1946, many significant structures within historical parks and historic sites—including Great Smoky Mountains, Saratoga, Salem, and others—badly needed repairs.³³⁰ Chapter Seven of this Historic Resource Study discusses the next major phase of development undertaken at Great Smoky Mountains and other national parks, the Mission 66 program that began in 1956.

HISTORIC PRESERVATION AT GREAT SMOKY MOUNTAINS NATIONAL PARK, 1931–1959

The general arc of preservation activity within Great Smoky Mountains NP from its initial establishment to the close of the 1950s closely paralleled and informed that of the activities within the NPS as a whole, characterized by a heavy emphasis on the earliest, pioneer-related, historic

³²⁷ Hosmer, *Preservation Comes of Age, Volume I*, 66-67; Unrau and Willis, *Administrative History*.

³²⁸ Hosmer, *Preservation Comes of Age, Volume I*, 75, 547, 561.

³²⁹ Justin Reich, "Re-Creating the Wilderness: Shaping Narratives and Landscapes in Shenandoah National Park," *Environmental History* 6, no. 1 (January 2001): 95–117.

³³⁰ Oscar L. Chapman, *Years of Progress, 1945–1952* (Washington, DC: National Park Service, 1953), 115–129; Hosmer, *Preservation Comes of Age, Volume II*, 717.

resources and a preference for artificial groupings of restored buildings. At the time of the park's authorization in 1926, hundreds of small farmsteads dotted the lower river valleys and coves, and the scars of the intensive logging that occurred between 1900 and the middle 1920s were readily apparent. Park planning efforts from the beginning were guided by the primary assumption that the Smokies would be a "natural" park, requiring the removal or disguise of substantial traces of prior human occupation as part of the restoration of the "wilderness." The NPS moved quickly to eradicate facilities erected by the logging companies (see Chapter Three). In the realm of farm buildings, NPS management decided as early as 1932 to preserve only the "best" examples of pioneer log construction and remove all other buildings that were not needed for park operations. The park conducted a survey of pioneer structures and did limited restoration work with CCC funding and manpower between 1935 and 1942. Simultaneously, NPS officials debated the related issue of preserving the "mountain culture" as a significant historic way of life. Two distinct approaches emerged: 1) allowing residents to continue to practice their accustomed way of life within the park so that visitors could observe mountain farms and mills in use or 2) preserving only a few deserted farmsteads and mills as "open-air museums." By the end of the 1930s, the latter view largely prevailed, and subsequent park development reflected this preference.

Initial Management of Historic Resources, 1931–1934

When Superintendent Eakin arrived in the Smokies in January 1931, more than 2,000 buildings and structures, ranging from crude farm outbuildings made of unpeeled round logs to substantial frame houses, were present within the authorized park boundaries. Many had been constructed within the last fifty years and were not yet considered historically significant by contemporary benchmarks, which tended to focus on buildings constructed prior to 1870. Others had been built to serve temporary needs and were never intended to stand permanently. Concerned about the potential hazards posed by abandoned buildings, from fire to re-occupation by local residents, and lacking sufficient resources to protect all of them, Eakin directed the rangers to destroy all empty buildings in the park unless he considered them to be outstanding examples of pioneer architecture. In May 1931 alone, he reported destroying 100 buildings and selling seven others.³³¹

In the spring of 1932, NPS Director Albright and Cammerer questioned Eakin's approach. Albright wrote, "I hope you are not trying to make a hundred percent clean-up of all the lands that have come under your control." Cammerer suggested that Eakin personally inspect each log cabin before deciding whether or not to destroy it. The NPS soon decided that only the "best examples" of pioneer log structures were worthy of preservation. Frame houses and outbuildings that lacked the favored rustic features were retained only if they could be used for ranger stations or quarters.³³² Based on figures given in the Superintendent's Monthly Reports for 1931 through 1934, park staff destroyed or removed at least 280 buildings. Those that remained standing were exposed to the elements and deteriorated rapidly; some were raided for materials, while others were burned by arsonists.³³³

Preservation Planning, 1934–1942: Field Museums and Mountain Culture Program

By the fall of 1934, local civic leaders, including members of the Southern Mountain Handicraft Guild, formed a Museum Committee with divisions in East Tennessee and Western North Carolina to collect artifacts and plan a museum of mountain culture in the park. The Committee conceived of a number of "branch museums" throughout the park, composed of clusters of historic buildings. Superintendent Eakin assigned a liaison officer to each of the Committee's two divisions: Hiram C.

³³¹ Superintendent's Annual Report, 1932, 3; Superintendent's Monthly Report, May 1931, 4; John H. Sprinkle, *Crafting Preservation Criteria: The National Register of Historic Places and American Historic Preservation* (Florence, KY: Routledge, 2014), 112.

³³² Superintendent's Annual Report, 1932, 5.

³³³ Catton, *A Gift for All Time*, 255.

Wilburn to the North Carolina division, and Willis King, later replaced by Charles S. Grossman, to the Tennessee division. Although technically employed by the CCC as foremen, Wilburn and Grossman essentially served as the park's first unofficial cultural resource managers. Wilburn had a strong interest in Cherokee and North Carolina history and had worked as a land surveyor for the North Carolina Park Commission, and Grossman was an architect by training.³³⁴

Wilburn and King conducted the first systematic survey of log buildings in the park in February 1935. They targeted their effort to the log cabins in the Cataloochee watershed, identified by the Museum Committee as a possible location for a "branch museum." After Grossman came on board, he initiated a broader survey in May 1935 of all existing buildings in the park, as directed by the Historic Sites Act, using CCC labor to inventory every structure and record the best architectural examples. By the end of the year, a total of 1,427 buildings were cataloged, 499 of which were of log construction. Grossman's final 1943 report tallied more than 1,700 buildings surveyed between 1935 and 1937. The largest concentrations of log buildings were located in Sugarlands (119), Cataloochee (101), Greenbrier (73), and Cades Cove (61). For the "best" log buildings, CCC crews did measured drawings, photographs, and brief building histories. Less important log buildings were photographed and sketched. Surveyors noted but did not record the vast majority of frame buildings. The CCC also restored two old grist mills in the park to working condition, the Mingus Mill at Mingus Creek and the Cable Mill at Cades Cove.³³⁵

Grossman produced a report on the historic buildings survey in July 1937, entitled "A Study for the Preservation of Mountain Culture in Field Museums of History." He emphasized the park's impressive collection of "pioneer structures," in particular those that survived in related groups such as farmsteads in their original settings (figure 6.1). He then outlined a two-pronged "field museum" approach to preserving the already deteriorated but extremely significant buildings. Because of the park's desire to interpret the pioneer lifestyle to visitors, Grossman proposed restoring existing farmstead groupings and "reorganizing" farmsteads and communities through the use of moved and reconstructed buildings. He recommended that the museums include a generous representation of all types of early structures found within the park, but heavily weighted toward the oldest ones. Grossman's plan stated: "Each community should include several groups of domestic buildings," including "One or two of the poorly constructed box houses" as "sufficient to illustrate the effect of the coming of the lumbering industry on the life of the mountain folk." Historically significant buildings slated for removal would be numbered and conserved for future restoration. Examples of the area's industrial history should be preserved in operating condition, like the restored Mingus and Cable mills, along with examples of community buildings like churches and schools. Grossman encouraged the maintenance of old roads, foot trails, and bridges in their original condition where possible. He also took into account factors such as convenience and accessibility, proposing that the field museums be located near the planned campgrounds in the park to facilitate protection and administration as well as access to tourists. The existing groups that he recommended for restoration, such as Cades Cove, clearly lent themselves to loop trips from accessible points but still preserved the feeling of isolation seen as characteristic of the region.³³⁶

Senior NPS staff in Washington who reviewed Grossman's report recommended that Director Cammerer approve a "Mountain Culture Program" to guide preservation at Great Smoky Mountains, beginning with a project at Cades Cove or Sugarlands led by Grossman, Wilburn, and Arthur Stupka (the park's naturalist). The NPS concept of the park's historical significance, described in a memo to Cammerer as "part of a cultural island, to a great extent isolated from the

³³⁴ Catton, *A Gift for All Time*, 253.

³³⁵ Lix, "Short History," 111; 1937 Master Plan.

³³⁶ Charles S. Grossman, "A Study for the Preservation of Mountain Culture in Field Museums of History" (Typescript, January 1937, Great Smoky Mountains National Park, Gatlinburg, TN).

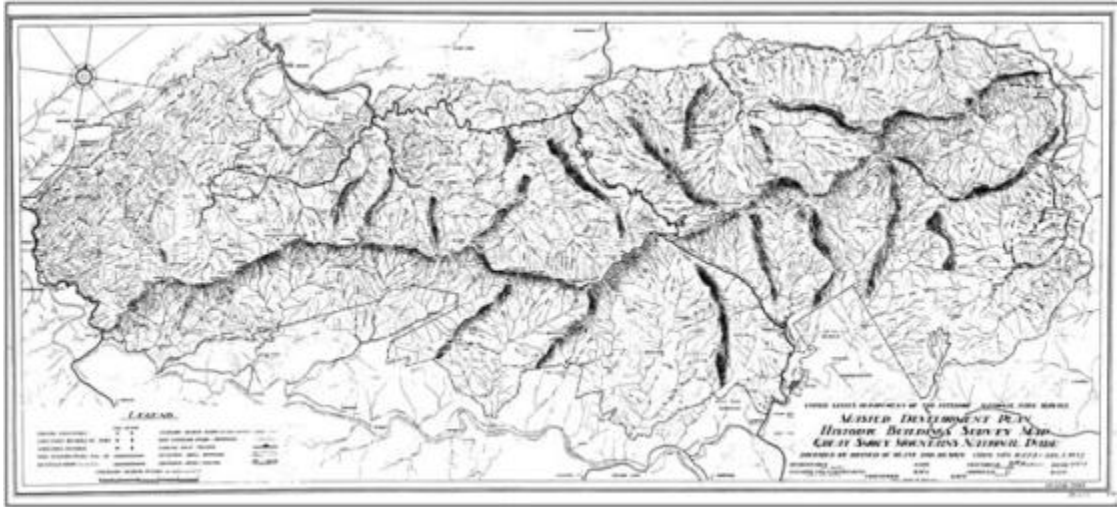


Figure 6.1. Historic Buildings Survey Map, 1937 Master Plan (Great Smoky Mountains NP, Gatlinburg, TN).

outside world, where we are able to see the survival in our contemporaries of language, social customs, unique processes, that go back to the 18th century and beyond,” perpetuated the contemporary stereotypes of the hearty mountain pioneers immune to change. Cammerer approved the plan on February 3, 1938, and Grossman, Wilburn, and Stupka submitted their “Report on the Proposed Mountain Culture Program for Great Smoky Mountains National Park” to Cammerer in June of that year. In this seminal document for cultural resource management, the group proposed a central museum of pioneer culture and field exhibits at four other locations that would have actual people on display. Wilburn strongly espoused the living history idea, while Grossman favored the open-air museum concept.³³⁷ Both variants focused attention on the earliest architectural resources and applied the high-level NPS design principles of visual and cultural harmonization, methods that ensured the resulting field museums would convey the idea that places like Cades Cove were relics of the pioneer era.

Cammerer’s annual report for 1939 highlighted the plans for a mountain culture program at Great Smoky Mountains, and the 1939 Master Plan for the park included field museums for Cades Cove (figures 6.2 and 6.3) and Mingus Creek (Oconaluftee).³³⁸ However, park Superintendent Eakin continually gave the field museum projects low priority so that they did not get funded. Eakin viewed lessees and empty cabins as management problems, not opportunities for interpretation. In 1940, Cammerer wrote to Eakin to remind him, “While no one wishes to minimize the importance of the fine scenic qualities of the Great Smoky Mountains area, the Service cannot on the other hand afford to neglect the human element which in this park is of especial significance.”³³⁹ Wilburn also tried to kickstart the program that year by addressing three lengthy memos to the superintendent, including a restatement of the mountain culture program proposal that listed the buildings, industries, and craftworks planned for Cades Cove, Cataloochee, Ravensford, Smokemont, Sugarlands, and Little Greenbrier. However, most of the park staff did not share Wilburn’s assertion that funding should be divided equally between cultural history and natural history projects.³⁴⁰ A letter from Eakin to Cammerer dated May 12, 1941, summarized his general

³³⁷ Catton, *A Gift for All Time*, 258.

³³⁸ 1939 Master Plan.

³³⁹ Catton, *A Gift for All Time*, 259.

³⁴⁰ Catton, *A Gift for All Time*, 260.



Figure 6.2. Cades Cove Area, 1939 Master Plan (Great Smoky Mountains NP, Gatlinburg, TN).



Figure 6.3. Field Exhibit of Mountain Culture, Cades Cove, 1939 Master Plan (Great Smoky Mountains NP, Gatlinburg, TN).

management approach: “After adequate protection force has practically been achieved, it will be possible to concentrate on pioneer culture history of the Park.”³⁴¹

Similar issues arose at other parks in the system around this time, highlighting the tensions inherent in natural parks with historic resources. At Shenandoah National Park, established by Congress the same year as Great Smoky Mountains NP, the NPS also obtained a large populated area of private land for the purpose of preserving a perceived wilderness landscape. Proponents of the park in the Blue Ridge Mountains emphasized the scenic and primeval qualities of the landscape, despite the presence of human communities. A 1930 newspaper article on the proposed park noted, “Attractions will be, principally, the wild scenery of a timbered area largely ravaged by lumberman and the picturesque natives... It is assumed the mountain folk will not be moved from their shacks. They are

³⁴¹ Brown, *The Wild East*, 128.

local color and proof of the untamed nature of the park—just as deer or bear might be in Michigan or Alaska.”³⁴² However, as the NPS refined its policies regarding leaseholders during the 1930s, the plans for Shenandoah changed. Park developers ultimately “obliterated almost all traces of human history” in favor of re-creating the natural history.³⁴³

At the other end of the spectrum, the NPS intentionally created a “museum of the managed American countryside” along the Blue Ridge Parkway, the 469-mile scenic route begun in 1935 to connect Shenandoah and Great Smoky Mountains national parks.³⁴⁴ In their careful orchestration of the scenic experience, the planners made no pretense of preserving the existing conditions, but at the same time they acknowledged the appeal of pioneer mountain history to visitors. Following the example of the program developed at Great Smoky Mountains, NPS historian Roy Appleman co-authored a report on the “Preservation of Mountain Culture in the Blue Ridge Parkway” in October 1940. The NPS subsequently established the Mabry Mill historic area as an outdoor museum within the parkway boundary, placing clear emphasis on the region’s earliest history combined with aesthetic design. Park officials removed the kerosene engine used to power the extant grist mill, rebuilt and put into service the older overshot waterwheel, and added a pond in front of the mill to enhance its photogenic qualities. They also removed a two-story frame farmhouse built in 1914 and replaced it with a log cabin from another county, relocated the Mabry blacksmith shop to a point near the mill, and installed exhibits of “mountain industry” such as a whiskey still and sorghum press. Later developments along the Blue Ridge Parkway followed the Mabry Mill model, including a pioneer farm established in 1953 near Waynesboro, Virginia, that features several examples of log architecture. The NPS also entered into cooperative agreements with the Southern Highland Handicraft Guild, which opened a Parkway Craft Center in 1951 for the sale of pioneer goods at a ca. 1900 country estate.³⁴⁵

To assist Great Smoky Mountains NP with the implementation of their mountain culture program, Appleman arranged for a study of the most salient issues by Dr. Hans Huth, a German expatriate and former curator of royal palaces and parks in Prussia and Berlin who worked as a special consultant for the NPS. Huth’s August 1941 report noted the growing tendency within the NPS toward at least a theoretical recognition of the importance of mountain culture but acknowledged the practical difficulties involved with its preservation. He emphasized the importance of considering the entire picture in creating an open-air museum as opposed to restoring a handful of isolated buildings or confining the museums to buffer areas on the periphery of the park. He also elaborated on the general objectives behind the program, offering a glimpse into contemporary preservation philosophy:

In a strictly historically determined setting, such conditions could not be allowed to be changed, for example, at Hopewell, more recent parts of the iron master’s house could not be torn down in order to purify the older part of the building. Here it is different, as it is not desired to show the development of a farm group, but rather a typical one with a conglomeration of log cabin, barn, crib, pigsty, spring house and smithy in one case, while in some other, an apple-house, a mountain barn, and perhaps an apiary would be included. If it so happens that one of these buildings is missing or is represented by a modern boxed structure, there is no reason why such a building might not be supplemented by an appropriate building taken from somewhere else; all the more if it is some isolated and inaccessible structure which could not well be preserved anyhow. This procedure is perfectly legitimate as long as

³⁴² Quoted in Reich, “Re-Creating the Wilderness,” 104-105.

³⁴³ Reich, “Re-Creating the Wilderness,” 95.

³⁴⁴ “History and Culture,” accessed September 24, 2013, <http://www.nps.gov/blri/historyculture/index.htm>.

³⁴⁵ Phil Noblitt, “The Blue Ridge Parkway and Myths of the Pioneer,” *Appalachian Journal* 21 (1994): 394-409.

*all the pros and cons are considered and as long as it is kept in mind that moving buildings is not the ideal procedure for preservationists.*³⁴⁶

Huth's individual recommendations for how to implement the program at Great Smoky Mountains informed Appleman's own subsequent proposal, submitted December 6, 1941, the day before Pearl Harbor. Appleman outlined the concept of a central museum and three open-air museums at Cades Cove, Oconaluftee, and Cataloochee, each with a different emphasis (mountain homes/artisan colony, mills and industrial life, and farming, respectively). He also stated two basic assumptions: the program must focus on physical remains and objects associated with the pioneer way of life rather than attempt to perpetuate that way of life; and for practical reasons the buildings worth exhibiting would have to be moved and grouped in a few central locations, with the others either demolished or allowed to decay. This proposal dovetailed in many ways with that put forward by the park's interpretive division a month earlier, which called for two museums—one focused on science at Sugarlands, the other focused on mountain culture at Mingus Creek—in addition to an outdoor exhibit of log buildings at Cades Cove modeled after the outdoor museums in Scandinavia. Appleman's proposal became the basis for future development of the Mountain Culture Program at Great Smoky Mountains NP, but external events postponed any further progress on it until after World War II.³⁴⁷

When the onset of World War II ended the CCC program and reduced NPS appropriations, the maintenance and repair of pioneer structures at Great Smoky Mountains was left to leaseholders for the duration.³⁴⁸ Grossman summarized the accomplishments of the park's rehabilitation program to date in his 1943 report that listed the inspection of over 1700 buildings, most recorded with photos; scale drawings of six buildings for HABS; restoration of 12 buildings; stabilization of approximately 24 buildings; and collection of over 1300 artifacts for the mountain culture museum.³⁴⁹

Mountain Culture Program, Post-World War II to 1959

In 1945, as the end of the war seemed close to reality, NPS Chief Landscape Architect Thomas Vint attempted to jump-start the museum program at Great Smoky Mountains with his proposal to convert the existing park headquarters at Sugarlands into a natural history museum and build scaled-down offices behind it as a lower-cost alternative to constructing a new museum building. The park's naturalist Arthur Stupka prepared an interpretive prospectus the following spring that reiterated the pre-war plan for two museums and incorporated Vint's recommendation regarding the conversion of the Tennessee headquarters into the natural history museum. In addition to the outdoor museum at Cades Cove included in the pre-war plan, Stupka also included a "major field exhibit of mountain culture" on Mingus Creek near the proposed mountain culture museum, consisting of farm units in a natural setting, a tub mill, pounding mill, and schoolhouse, all furnished but not occupied. The prospectus also called for minor field exhibits at the Jim Carr place on the main park road and the Bales place at Roaring Fork, as well as the stabilization of other important pioneer buildings in Cataloochee, Deep Creek/Indian Creek, and Greenbrier. Despite its ambitious restoration scope, described by some regional staff as "on a par with Williamsburg," the NPS director signed Stupka's proposal on May 6, 1946.³⁵⁰

Minimal funding over the ensuing decade, however, tabled the program once more. The park was able to undertake restoration and rehabilitation work on approximately 48 historic buildings

³⁴⁶ Hans Huth, "Report on the Preservation of Mountain Culture in the Great Smoky Mountains National Park" (Typescript, August 1941, Great Smoky Mountains National Park, Gatlinburg, TN), 26.

³⁴⁷ Catton, *A Gift for All Time*, 261, 265.

³⁴⁸ Superintendent's Monthly Reports, November 1942, 2, February 1953, 3.

³⁴⁹ Catton, *A Gift for All Time*, 261.

³⁵⁰ Catton, *A Gift for All Time*, 267.

throughout the park, primarily in Cades Cove and Cataloochee. To pacify impatient North Carolina residents who lamented the lack of interpretive programs on their side of the park, the regional office opened a temporary Pioneer Museum exhibit at the Oconaluftee Ranger Station in the summer of 1948. In August 1952, Charles Grossman returned to the park from his current post at the Blue Ridge Parkway to oversee the initial phase of the mountain culture field museum at Oconaluftee, which opened to the public in June 1953. Additional buildings were added to the Pioneer Farmstead when funds allowed in 1959.³⁵¹

After this point, park development, including management of field museums, changed its focus to visitor experience enhancements. In the 1960s, living history became the primary component of the interpretive programs, which expanded to encompass mountain culture from ca. 1890–1920 along with the earlier history. However, the field museums and other extant historic resources reflected the preservation decisions made in the 1930s and 1940s, characterized by a concentration on the settlement period. Management of these resources after 1959 consisted primarily of continued maintenance and stabilization, with no major alterations to the original compositions and landscapes.³⁵²

PARK PRESERVATION ACTIVITY, 1933-1959

The preservation projects undertaken at Great Smoky Mountains NP during the initial park development period were concentrated primarily in three distinct areas: Mingus Creek/Oconaluftee; Cades Cove; and Cataloochee. Some isolated rehabilitations of historic resources occurred in other areas of the park.

Mingus Creek/Oconaluftee (Swain County, NC)

The CCC completed repairs to the Mingus Mill in 1936 and 1937, and the NPS subsequently leased it to a local miller for demonstration purposes until 1940. As early as 1938, Wilburn recommended the area around the mill to the park superintendent as suitable for development as an historical museum center, including mountain culture exhibits.³⁵³ A 1961 proposal “to restore the Mill site atmosphere” by relocating a preserved log home and outbuilding onto the Mingus Mill site to represent the miller’s living quarters was never implemented. The same proposal noted that the mill should be considered as an integral part of the Pioneer Farmstead, despite the fact that the two sites were separated by the Newfound Gap Road.³⁵⁴ In 1963, the Knoxville company that built the original turbine for the mill completely reconstructed and restored the dam, mill race, flume and turbine, although it was not connected to the shafts that turn the stones until 1968, when the NPS rehabilitated it again.³⁵⁵ The mill has operated seasonally since then under a cooperative agreement between the park and the Great Smoky Mountains Association. The dam, race, flume, and penstock have been repaired many times and completely rebuilt at least twice.

Following the opening of the temporary Pioneer Museum in the summer of 1948, engineers began preparing topographical surveys for the planned pioneer culture exhibits at the site. A composite map prepared in April 1949 shows four distinct groupings of buildings proposed for different “flats” along Mingus Creek, beginning at a spot directly opposite the Mingus Mill (figure 6.4). The buildings were to come from Deep Creek, Cades Cove, Cataloochee, Roaring Fork, Jungle Brook,

³⁵¹ Catton, *A Gift for All Time*, 267; Superintendent’s Monthly Reports, August 1952–January 1953, January–July 1959.

³⁵² Catton, *A Gift for All Time*, 270–274.

³⁵³ H.C. Wilburn, Waynesville, North Carolina, to J. R. Eakin, Superintendent, Great Smoky Mountains NP, February 19, 1938, Hiram C. Wilburn Collection, Great Smoky Mountains NP Archives.

³⁵⁴ Fred C. Overly, Superintendent, Great Smoky Mountains NP, to Chief EODC, July 8, 1961, Mingus Mill Folder, Great Smoky Mountains NP Archives.

³⁵⁵ Trout, “Milling in the Smokies.”

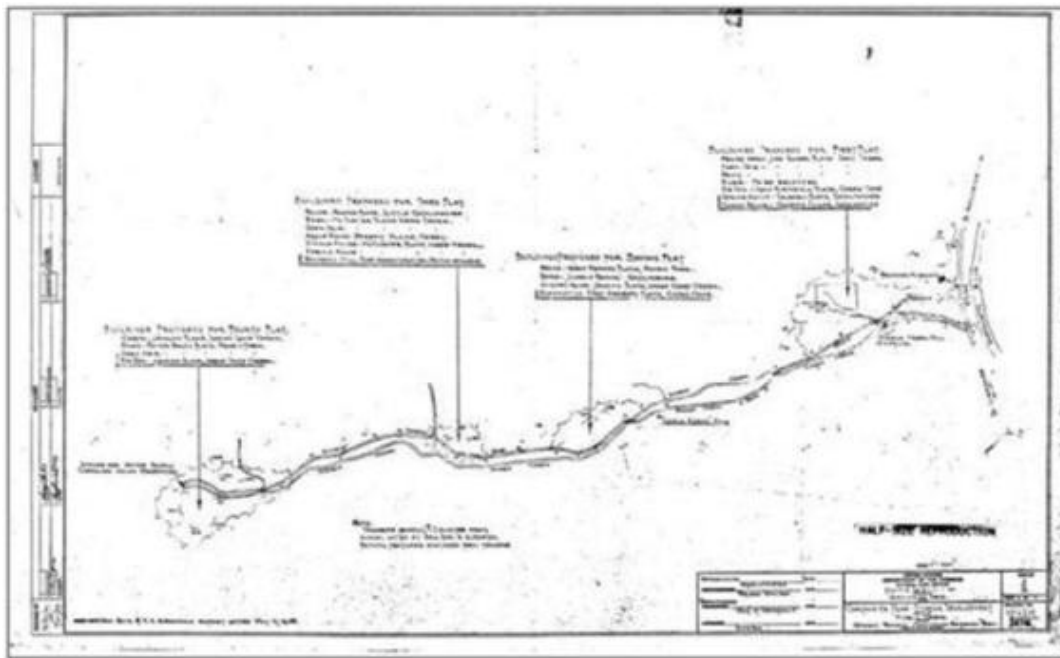


Figure 6.4. Composite Plan – Pioneer Development, 1949. Drawing NP-GSM 2476 (Great Smoky Mountains NP, Gatlinburg, TN).

Indian Camp Creek, Webb Creek, and Cosby. In addition, the Third Flat proposal included a reconstructed pounding mill.³⁵⁶ Detailed mapping of the first and second flats were done in February 1949, but the monthly Superintendent's Reports do not mention the project again until May 1952, when an "understaffed and overworked" organization returned to the mapping.³⁵⁷ It appears that during the interim, the proposal was scaled down to involve a single grouping of relocated buildings on a site closer to the ranger station/museum and the Oconaluftee River.

The re-erection of the buildings under the supervision of NPS Architect Grossman began in September 1952. Over the next four months, nine restored buildings were arranged on the site so that visitors could circulate easily through a "typical" nineteenth-century farmstead: the Joe Queen House and Corn Crib and Jim Beard Corn Crib/Gear Shed from the Thomas Divide near Deep Creek; the Conard Meat House, Caldwell Spring House, and Messer Apple House from Cataloochee; a blacksmith shop from Cades Cove; the Jenkins Chicken House from Indian Camp Creek; and the Floyd/Enloe Barn from a site only 200 yards away. Local craftsmen performed much of the work, using historic methods to produce replacement building materials as needed. After the Pioneer Farmstead officially opened in June 1953, visitation to the North Carolina side of the park reached an all-time high. As a testament to the perceived authenticity of the reconstructed farmstead, the Walt Disney Production company used the site as a stage set in the fall of 1954 for a television movie about Davy Crockett.³⁵⁸

When funding became available in late 1958, the park completed additional field surveys at the Pioneer Farmstead and awarded a contract for the relocation of several more buildings in the spring of 1959. Park documents do not list the specific buildings included in this phase of the project, but they likely included a pig pen from Indian Camp Creek. At some point during the farmstead

³⁵⁶ Drawing NP-GSM 2476, "Composite Plan – Pioneer Development," April 25, 1949.

³⁵⁷ Superintendent's Monthly Reports, January 1949, May 1952.

³⁵⁸ Superintendent's Monthly Reports, August-September 1954.

development in the 1950s, workers also constructed several ancillary structures intended to replicate examples found throughout the park, including a woodshed, an outhouse, and a bee gum stand.³⁵⁹

Cades Cove (Blount County, TN)

The NPS established the first outdoor museum at Great Smoky Mountains NP in the idyllic valley of Cades Cove, which it deliberately designated as a setting for pioneer-themed exhibits. During the 1920s, 110 families (approximately 600 people) occupied the cove, and its open agricultural fields afforded panoramic views of the mountains rising up to 2,000 feet above the valley floor. During early discussions of the area, park boosters, including the Southern Appalachian National Park Commission, stressed the area's ruggedness, its primeval natural character, and value as a botanical preserve. The NPS assumed the cove would revert to a wild state like the rest of the park and did not initially consider preservation of the existing landscape. By 1935, however, park staff recognized that the cove's visual appeal lay in the contrast between the agricultural valley and the forested hillsides. Consequently, the NPS decided to maintain the open fields by leasing land back to some of the former owners. The open-field management policy formally began on July 28, 1937, with the approval of a memo that outlined a "meadow maintenance project" based on agricultural leasing on a trial basis for three years. By the end of the three years, 13 farmers maintained 1,398 acres in Cades Cove, and the decision was made to continue the program.³⁶⁰

Between 1935 and 1937, CCC crews restored the overshot mill in Cades Cove while Grossman oversaw the park-wide building inventory and developed his plan for creating field museums. Most of the original mill had to be taken down and rebuilt from salvaged materials supplemented by newly cut lumber. The operating Cable Mill opened to the public as an historical exhibit in 1936 and became the centerpiece for a planned domestic/industrial museum grouping. Over the next two years, CCC labor moved two buildings, a corn crib and a cantilever barn, from elsewhere in the cove to the Cable Mill site and restored them (figure 6.3). The barn chosen was believed to be very close in size and construction to one that originally stood in the same location on the Cable property.³⁶¹

The earliest master plans for the park outlined the restoration plans for other groups of buildings in the cove. Although log residences were a minority in Cades Cove when the park was established, the NPS prioritized their restoration based on their historical, architectural, and aesthetic value. The plans stipulated that the buildings on the John Oliver and Elijah (Leige) Oliver homesteads be preserved on their existing sites, rather than relocated within the park, because "much of the charm of these groups would be destroyed by moving them."³⁶² The Elijah Oliver property, conveniently located near the proposed loop road, featured one of the most intact dispersed farmsteads in the cove, with a cabin, barn, corn crib, smokehouse, and springhouse. The Henry Whitehead and Peter Cable homesteads were also identified as containing early architecturally significant buildings. The CCC undertook initial rehabilitation work at each of these sites in 1937 and 1938. In addition, the park removed some later frame additions on log buildings in the cove, including the Carter Shields Cabin.³⁶³

³⁵⁹ Superintendent's Monthly Reports, January-July 1959; Dale Ditmanson, Superintendent, Great Smoky Mountains NP, to Jeffrey J. Crow, State Historic Preservation Officer, North Carolina, August 31, 2012, on file at Great Smoky Mountains NP.

³⁶⁰ Terence Young and Robert B. Riley, ed. *Theme Park Landscapes: Antecedents and Variations* (Washington, DC: Dumbarton Oaks Research Library and Collection, 2002), 162; National Park Service, *Cultural Landscapes Inventory: Cades Cove Landscape* (Atlanta, GA: Southeast Regional Office, 1998).

³⁶¹ Superintendent's Monthly Reports, May 1936, 3, September 1937, 6, April 1938, 5, September 1938, 5-6; National Park Service, *Cultural Landscapes Inventory: Cable Mill* (Atlanta: Southeast Regional Office, 1998).

³⁶² 1939 Master Plan.

³⁶³ Superintendent's Monthly Reports April 1938, September 1938; National Park Service, *CLI: Elijah Oliver Homestead*; National Park Service, *Cultural Landscapes Inventory: Henry Whitehead Homestead* (Atlanta, GA: Southeast Regional Office, 1998); National Park Service, *Cultural Landscapes Inventory: Peter Cable and Dan Lawson Homestead* (Atlanta, GA: Southeast Regional Office, 1998).

By the 1940 dedication of Great Smoky Mountains NP, the entire cove belonged to the park. The implementation of the 1938 master plan created a prescribed visitor experience at Cades Cove that incorporated the park's field museum concept and preservation goals. The construction of Laurel Creek Road substantially altered access to and circulation through the area, guiding visitors past each of the restored pioneer sites, through working agricultural fields, and providing them with scenic vistas along the way. In addition to the residences and the Cable Mill site, tourists also saw representative community buildings, as the NPS allowed three of the oldest church congregations in the cove to maintain their buildings and grounds by special use permit for many years. It is unknown how long the Methodist Church remained active, but the Missionary Baptist Church closed in 1944 and the Primitive Baptist Church continued to hold worship services through the 1960s.³⁶⁴

After World War II, the NPS again revisited the land-management program for Cades Cove. In 1946, the park initiated a "historical" program in cooperation with the US Soil Conservation Service to "perpetuate the scene of Cades Cove" by managing the land as "one big farm." Local farmers obtained agricultural permits to graze cattle and run haying operations that kept the valley floor landscape open and continued to preserve the cove's beautiful vistas (figure 6.5).³⁶⁵ Between 1949 and 1959, the park further developed Cades Cove with the completion of the main loop road and the establishment of the adjacent campground. Implementation of the initial restoration and rehabilitation plans for the area also resumed after the war, with continued work occurring at the John Oliver, Elijah Oliver, and Henry Whitehead places. Between 1956 and 1958, the park enlarged the historical exhibit at the Cable Mill (figures 6.6 and 6.7) to include a restored smokehouse and drive-through barn moved from the Cataloochee area, the rehabilitated Becky Cable House moved from its location a half-mile upstream on Forge Creek Road, a reconstructed blacksmith shop, and a sorghum-making exhibit. In addition, an extensive restoration program occurred at the Tipton-Oliver Homestead, where the log cabin and smokehouse were rehabilitated. Beginning in 1959, park reconstructed the apiary, woodshed, barn, and corn crib in their original locations on the site. The blacksmith shop on this property was rehabilitated between 1966 and 1967.³⁶⁶

Park interpretive materials from the 1950s provide insight into the NPS preservation philosophy applied to the resources in Cades Cove. Text in a park ranger manual noted, "It has been felt by the NPS that here in the Great Smoky Mountains National Park a part of the world should be conserved as man had made it" and the "slow, easy, one-way road is symbolic of the way of life of those who lived in the Cove." A sign at the cove entrance described the buildings encountered by visitors: "Sturdy log structures, their timbers hewed with a skill now lost, remain as memorials to a way of life. The fine frame buildings show self-taught advance in construction methods." The Cades Cove outdoor museum developed from 1933 through 1959 "achieves such reality that visitors never stop to think of it as a synthetic creation designed to force back the wilderness for a show of history and folk culture."³⁶⁷

³⁶⁴ National Park Service, *Cultural Landscapes Inventory: Methodist Church and Cemetery* (Atlanta, GA: Southeast Regional Office, 1998); National Park Service, *Cultural Landscapes Inventory: Primitive Baptist Church and Cemetery* (Atlanta, GA: Southeast Regional Office, 1998); National Park Service, *Cultural Landscapes Inventory: Missionary Baptist Church and Cemetery* (Atlanta, GA: Southeast Regional Office, 1998); Charles W. Maynard, *Churches of the Smokies* (Gatlinburg, TN: Great Smoky Mountains Association, 2004).

³⁶⁵ Terence Young, "False, cheap, and degraded: when history, economy and environment collided at Cades Cove, Great Smoky Mountains National Park," *Journal of Historical Geography* 32 (2006): 169–189.

³⁶⁶ Superintendent's Monthly Reports, July 1956–September 1959; National Park Service, *Cultural Landscapes Inventory: Tipton-Oliver Homestead* (Atlanta, GA: Southeast Regional Office, 1998); National Park Service, *Cultural Landscapes Inventory: John and Lucretia Oliver Homestead* (Atlanta, GA: Southeast Regional Office, 1998).

³⁶⁷ Brown, *The Wild East*, 202.

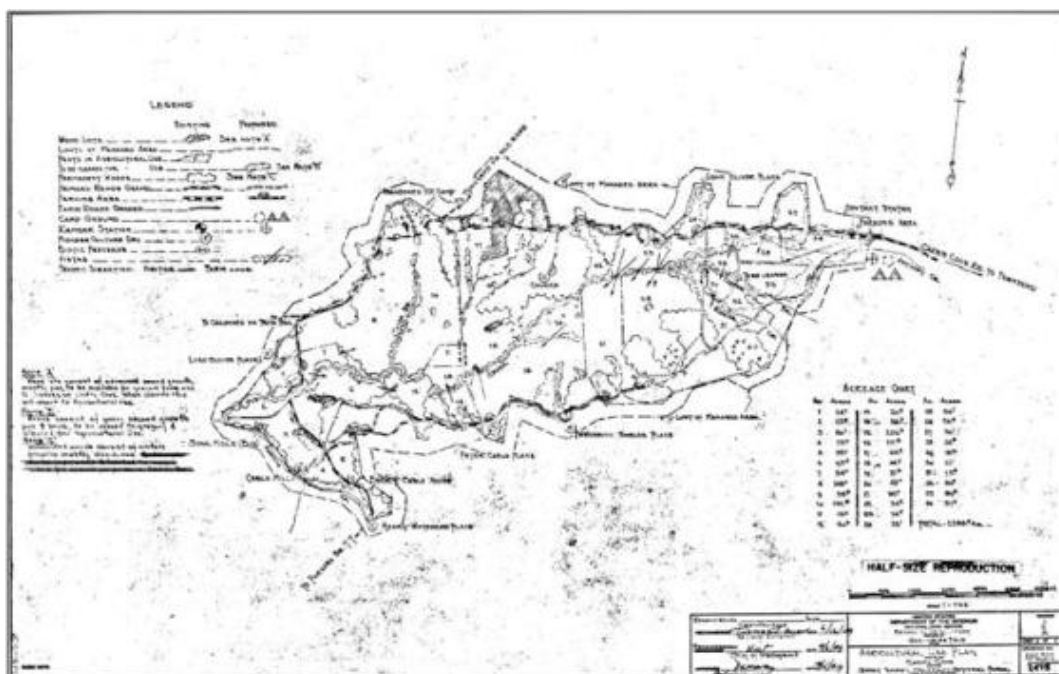
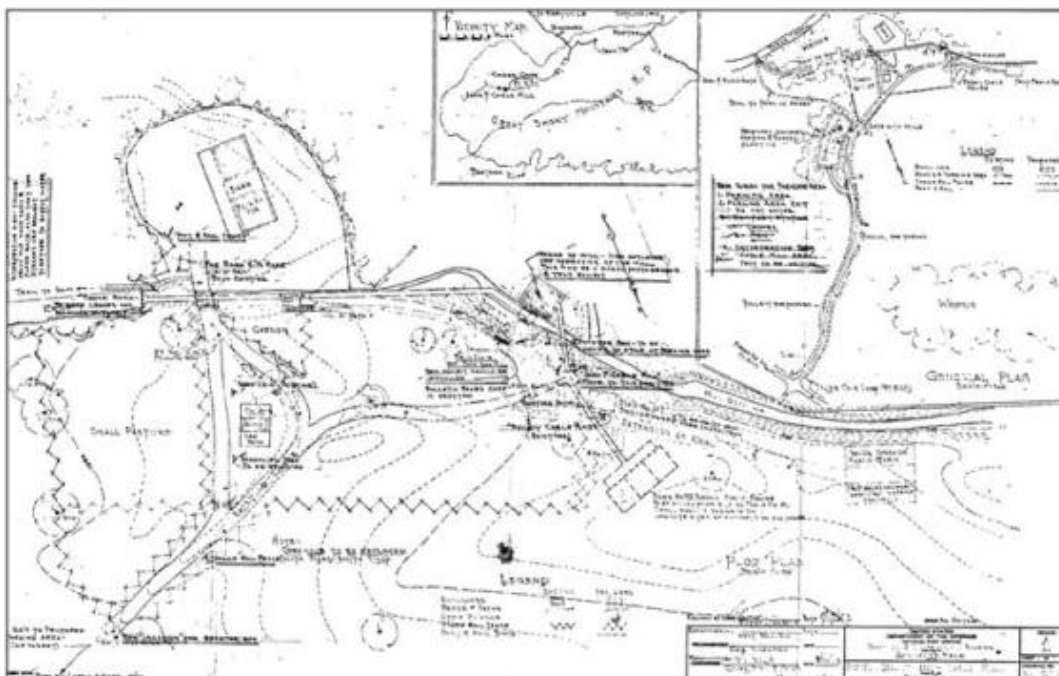


Figure 6.5. Agricultural Use Plan, Cades Cove, 1949. Drawing NP-GSM 2475 (Great Smoky Mountains NP, Gatlinburg, TN).



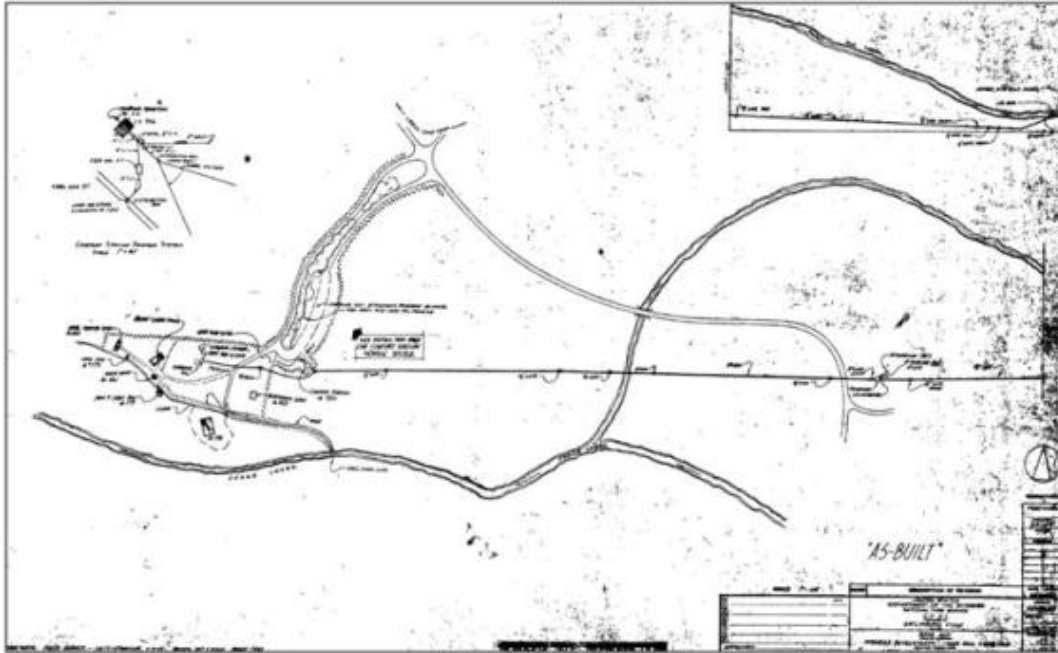


Figure 6.7. Base Map, Pioneer Development – Cable Mill, Cades Cove, 1962. Drawing NP-GSM 60216 (Great Smoky Mountains NP, Gatlinburg, TN).

Cataloochee (Haywood County, NC)

Accessible into the 1930s only by a narrow twisting road, the Cataloochee Valley near the northeastern edge of the park saw little development during early years. Wilburn and King's initial 1935 survey of the Cataloochee area recommended that the most intact of the three farmsteads in Little Cataloochee, the Cook place, be restored as an unfurnished exhibit of a "typical isolated mountain home," while the log cabins in Big Cataloochee be dismantled, removed, and placed in storage in anticipation of future reconstruction in a more convenient location. When Grossman and Wilburn returned in 1937, they inspected and photographed 62 sets of buildings to identify those that could be removed without further study. In general, the buildings of Cataloochee were more modern than those found in Cades Cove or Oconaluftee, dating to the early decades of the 20th century. As a consequence of the park's decision to retain only the most intact early buildings, many of Cataloochee's buildings were burned, and only 9 out of 70 sites have extant historic buildings on them now. The buildings that were spared included some that remained in use by leaseholders; former residents of the area remained in Little Cataloochee through 1945, while the last leaseholder left Big Cataloochee in 1968.³⁶⁸

The park used the Hub Caldwell House in Big Cataloochee as a warden's residence from 1933 to 1938 and then the Jarvis Palmer House, also in Big Cataloochee, from 1938 through 1971. Other park personnel lived at the Hub Caldwell House between 1938 and 1971, when the building became a ranger station. In late 1940, the CCC began work on a road intended to provide access to a proposed campground site in Cataloochee near the Palmer Chapel, but the road was only partially completed when they left the park in May 1942.³⁶⁹ This construction effort relocated the portion of the Cataloochee Road (a.k.a., Cataloochee Valley or Cataloochee Creek Road) between the Cataloochee

³⁶⁸ Givens, "Cataloochee," 59-62, 68, 76-77, 93, 101, 106; Carroll and Pulley, *Historic Structures Report, Little Cataloochee*, 22; Arthur, *Western North Carolina*, 485; Flaugh, *Cataloochee Historic District*, 33.

³⁶⁹ Flaugh, *Cataloochee Historic District*, 33-41.

Turnpike and Beech Grove School. Huth's 1941 report identified Cataloochee as "probably the most important tourist center the park will have on the North Carolina side" but noted the difficulty presented by its isolated location. Consequently, he placed any park development in this area at a lower priority but stipulated that emergency preservation work should be done as soon as possible, in particular at the Upper Will Messer and Dan Cook places in Little Cataloochee. He recommended letting the farm buildings located on the higher slopes around the valley decay given their general disrepair.³⁷⁰

Preservation work conducted in Cataloochee, among other areas, during 1948 and 1949, included the warden station at the Jarvis Palmer House in Big Cataloochee and the Jim Hannah Cabin in Little Cataloochee. In addition, the Conard smoke house and the Caldwell spring house were restored in advance of their relocation to the Pioneer Farmstead (now the Mountain Farm Museum) at Oconaluftee. The local congregation initially maintained the Big Cataloochee Methodist Church (Palmer Chapel), but the NPS took responsibility for the building at some point between 1930 and 1960. It also maintained the Little Cataloochee Baptist Church. Cataloochee residents continued to use the Beech Grove School into the early 1950s. In general, the Cataloochee area remained low on the list of park development and rehabilitation priorities during the post-World War II years, and further work did not occur until the 1970s (figure 6.8). By the time funds were available for the restoration and interpretation of the valley's historic buildings, very few remained intact. Much of the former agricultural lands in the area became reforested. Mission 66 plans for the area noted "the pioneer atmosphere of old abandoned fields and orchards, the rotting rail fences."³⁷¹

The NPS developed ambitious plans, including road improvements, for a major tourist area in Cataloochee in the 1970s, but opposition prevented the implementation of much of the work. Preservation plans outlined at that time and eventually completed included the repair and rehabilitation of the Hiram Caldwell homestead, the Jarvis Palmer homestead, and the Steve Woody homestead. Buildings on all three sites are now open to visitors as historic exhibits, and the adjacent fields are mowed to present the cove as it looked during the settlement period. After vandals caused substantial damage to the Dan Cook Cabin, HABS documented the building thoroughly and it was then dismantled and placed in storage until its reconstruction on the original site in 1999. In 1978, the NPS relocated the Will Messer Barn from Little Cataloochee to a site adjacent to the ranger station in Big Cataloochee. Portions of the CCC's relocated Cataloochee Road were improved and paved between 1964 and 1971 (see discussion in Chapter 7).³⁷²

Other NPS Pioneer Settlement Areas

Huth's 1941 report identified several possibilities for loop trails near Sugarlands and the Little Pigeon River that would offer access to interesting historic resources. The Ephraim Bales place (Sevier County, TN) was included in the park's early restoration projects, with work done on the cabin in 1941. Additional work, including the restoration of the outbuildings (barn, pig pen, and corn crib), occurred during the 1949–1959 period.³⁷³ The tour road through Roaring Fork that encompasses the Bales property and the Alfred Reagan House and Tub Mill was a Mission 66-era project that built upon the park's earlier preservation work in this area.

³⁷⁰ Huth, "Report on the Preservation of Mountain Culture," 28-29.

³⁷¹ Flaugh, Cataloochee Historic District, 43-44.

³⁷² Flaugh, Cataloochee Historic District, 41-44, 132.

³⁷³ Huth, "Report on the Preservation of Mountain Culture," 27; Superintendent's Monthly Reports, March 1958, May-September 1958; National Park Service, Historic Building Report: Ephraim Bales Group, Part I (Typescript, May 1957, Great Smoky Mountains NP, Gatlinburg, TN).

was never implemented. Substantial rehabilitation work on these buildings did not occur until the 1960s and 1970s. The NPS moved the Alex Cole Cabin to a site along the Roaring Fork-Cherokee Orchard Road ca. 1978.³⁷⁶

KNOWN RESOURCE TYPES

Resources associated with this context can be grouped into one type, outdoor field museums. The discussion of this resource type in this HRS is limited to buildings and structures. Further study and evaluation of this resource type as a cultural landscape should be undertaken by qualified historical landscape architects. Such study would also address the overall site design characteristics as potential criteria for evaluating the resource type under Criterion C.

An outdoor field museum is a distinct area set aside within the park as a cultural resource for the purpose of interpreting the history of the park lands to visitors using historic buildings and structures. The resource type can include one or more of the following resources:

- Buildings or structures constructed prior to the park's establishment in 1926 and restored on their original site;
- Buildings or structures constructed prior to the park's establishment in 1926 and restored in a new location within the park; and/or
- Reconstructions and replicas of buildings or structures that existed on park lands prior to the park's establishment in 1926.

Outdoor field museums are eligible under Criterion A because they exemplify the NPS policies and practices developed during the New Deal to manage cultural resources within natural and historical parks. As key components of the unified master plans created by architects, landscape architects, historians, and engineers, outdoor field museums enabled parks to preserve representative examples of historic buildings and provide visitors with scenic and cultural points of interest. The sites also reflect national trends in historic preservation and contemporary perspectives on the early history of Southern Appalachia. Outdoor field museums comprising artificially created groupings that have achieved significance after they were moved and retain integrity to that time do not need to meet Criteria Consideration B for moved properties.

To qualify for National Register listing under this context, resources must have been restored or reconstructed as part of the initial historic preservation program established at the park during the period from 1926 to 1959. They must conform to the NPS standards of historic preservation prevalent at the time, in particular those related to the design standards of visual and cultural harmonization. Resources should retain sufficient aspects of integrity to convey their associations with the creation of an outdoor field museum during that period. In-kind replacement of materials does not disqualify a restored or reconstructed resource from contributing to a district's significance under this context.

³⁷⁶ Grossman, "A Study for the Preservation of Mountain Culture."

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CHAPTER SEVEN: MISSION 66 ERA OF NATIONAL PARK SERVICE PLANNING AND DEVELOPMENT, 1945–1972

This context discusses resources in Great Smoky Mountains NP planned and constructed during the post-World War II era of national park development (from 1945 to 1972) under the system-wide improvement project known as Mission 66. National Park Service (NPS) Director Conrad L. Wirth (1889–1993) created the ambitious Mission 66 program to address deferred investment in park maintenance and to improve visitor facilities for the increased number of Americans who utilized the National Park System during the 1950s. The NPS funded the decade-long program from 1956 to the agency’s fiftieth anniversary in 1966. Wirth’s successor, George B. Hartzog, Jr. (1920–2008), initiated an extension of the Mission 66 program, under the new name “PARKSCAPE U.S.A.” (Parkscape) for publicity purposes, that ran from 1966 to 1972.

THE NATIONAL PARK SERVICE AND MISSION 66

The Mission 66 development program essentially redefined the role of the country’s national park system for a post-World War II society. It enabled hundreds of construction projects, implemented new planning procedures and design concepts, expanded the system in both size and scope, and reshaped the NPS identity in American culture. The comprehensive and top-down nature of the program, disseminated to individual parks through the regional offices, resulted in overall consistency across the park system with respect to facilities and infrastructure, even as the diversity of the parks warranted individual solutions to some issues.

Origins of Mission 66, 1941–1955

As discussed in Chapter Five, President Franklin D. Roosevelt’s New Deal programs implemented between 1933 and 1942 focused on economic recovery after the Great Depression in part by providing work for the unemployed. Under the direction of the NPS, the Civilian Conservation Corps (CCC), a New Deal work-relief program active from 1933 to 1942, significantly contributed to the rapid development of national parks. When the United States entered World War II in 1941, federal priorities shifted to supplying the war effort. By 1942, the New Deal programs that had sustained the parks during the Great Depression were discontinued and wartime budgets for maintaining the system were slashed. A substantial number of Park Service employees joined the armed services, leaving many parks with skeleton staffs. The lack of funding and manpower forced most parks to defer maintenance and improvement projects; consequently, park infrastructure deteriorated, sometimes to dangerous extents. These conditions persisted during the decade following the war as national resources were dedicated to rebuilding Europe under the Marshall Plan and the exigencies of the Cold War.

As the NPS struggled with budgetary shortfalls during the late 1940s and early 1950s, a new problem arose. The increased wages and leisure time that resulted from the general prosperity the nation experienced during the period, combined with the wholesale adoption of the automobile, provided more Americans than ever before the opportunity for vacation travel. National parks were among the most popular destinations, and the increase in visitation was dramatic. In the decade following the war, the annual visitation to national parks more than doubled, from 21,752,000 in 1946 to a record 50 million in 1955.³⁷⁷ Great Smoky Mountains NP experienced a similar increase,

³⁷⁷ Linda Flint McClelland, *Building the National Parks* (Baltimore, MD: Johns Hopkins University Press, 1998), 463.

going from 1,157,930 to 2,885,800 annual visitors during the same period. By 1956, it was the most visited national park in the system with nearly 3 million visitors.³⁷⁸

The demands placed on the already stressed facilities of the National Park System threatened its integrity. The NPS leadership and conservation groups worked to gain Congressional support to correct the problem but failed to gain significant headway until the media drew public attention to the plight of the national parks. One of the key events was an article by prominent historian Bernard DeVoto in the October 1953 issue of *Harper's Magazine* bearing the provocative title, "Let's Close the National Parks."³⁷⁹ DeVoto's article scathingly indicted the Federal Government's unwillingness to provide sufficient funding to operate the National Park System and struck a chord among the increasingly large number of Americans who treasured national parks and expressed their dissatisfaction to their Congressional representatives.³⁸⁰

Conrad L. Wirth's Vision, 1955

The inauguration of President Dwight D. Eisenhower in 1953 symbolized the first step toward change for national parks. Following the end of the Korean War, Eisenhower sought public works programs that would fuel the United States economy. With government priorities changing and increasing public pressure to address the state of the parks, NPS Director Conrad L. Wirth devised a strategy to implement "MISSION 66," a massive system-wide planning and development program to be completed by the NPS's 50th anniversary in 1966.

Wirth, a trained landscape architect, began his career with the NPS in 1931 as assistant director of the Branch of Lands. By 1933, he was overseeing CCC work at 560 state parks and administering the CCC in national parks. In 1951, he was appointed NPS Director and served in that capacity until 1963, when he left the NPS to serve as advisor to Laurance Rockefeller (1910–2004). In his autobiography, *Parks, Politics, and the People*, Wirth writes that he conceived the notion of Mission 66 during a weekend in February 1955 after considering it from the perspective of a congressman. Knowing that the development of the NPS would require a large sum of money, Wirth decided to request funding from Congress for a ten-year program that would begin in fiscal year 1956 in lieu of a yearly budget.³⁸¹

Wirth established two committees (a steering committee and a working committee) to plan and execute the Mission 66 program, appointing long-time NPS employees who represented different branches of the agency and were involved in 1930s and 1940s park planning. Lemuel "Lon" Garrison (1903–1984), who left his post as chief of conservation and protection to dedicate himself to Mission 66 planning, chaired the steering committee. Other members of the steering committee were Jackson Price, Donald Lee, Harry Langley, Thomas Vint, and John Doerr. The working committee comprised Howard Stagner, Robert Coates, Jack Dodd, William G. Carnes, Harold Smith, Roy Appleman, and Ray Freeman. Wirth's instructions were to "disregard precedent, policy and present operating and management procedure" and to "remember only the fundamental purpose of national parks and in this basis develop operating and development plans that would best meet the problem

³⁷⁸ National Park Service, "Mission 66 for Great Smoky Mountains National Park," Great Smoky Mountains National Park Archives, Gatlinburg, TN; National Park Service Public Use Statistics Office, NPS Stats, Annual Visitation (All Years) Park Report, Great Smoky Mountains National Park, accessed May 1, 2014, [https://irma.nps.gov/Stats/SSRSReports/Park Specific Reports/Annual Park Recreation Visitation \(1904 - Last Calendar Year\)?Park=GRSM](https://irma.nps.gov/Stats/SSRSReports/Park%20Specific%20Reports/Annual%20Park%20Recreation%20Visitation%20(1904%20-%20Last%20Calendar%20Year)?Park=GRSM).

³⁷⁹ Bernard DeVoto, "Let's Close the National Parks," *Harper's Magazine* 207 (October 1953), 49–52.

³⁸⁰ Larry M. Dilsaver, ed., *America's National Park Service: The Critical Documents* (New York, NY: Rowman and Littlefield Press, 1994).

³⁸¹ Sarah Allaback, *Mission 66 Visitor Centers: The History of a Building Type* (Washington, DC: National Park Service, Historic Structures and Cultural Landscapes program, 2000); Ethan Carr, Elaine Jackson-Retondo, and Len Warner, *Draft Multiple Property Documentation Form: The Mission 66 Era of National Park Development, 1945–1972*, Oakland, CA: National Park Service, 2006.

of parks today and the future.”³⁸² In eight months, the Mission 66 working committee prepared a comprehensive proposal containing policy guidelines, cost estimates, and data analyses for national park sites. Park superintendents were asked to prepare park “prospectuses” encompassing individual park needs. Mission 66 prospectus reports and budget estimates were created for 194 national parks and historic sites (not including Yellowstone, which had internal conflicts with a concessionaire). During this period of preparation, the specifics of the program (including the “Mission 66” name) were intentionally kept secret; however, the public was aware that a major program loomed that would affect national park properties across the country and potentially the surrounding communities.

Wirth selected Great Smoky Mountains NP to host the announcement of the plans for Mission 66. During the NPS Public Services Conference on September 20, 1955, he introduced Mission 66 in his keynote address, and the program became the main focus of discussion during the September 19–24 conference attended by approximately 200 superintendents and other officials. An illustrated, public-ready informational pamphlet, *The National Park System*, and the more extensive “MISSION 66 Report” accompanied Wirth’s presentation, during which he introduced the scope of the project and emphasized its importance to the national park system.

In defense of the large budget requests required for Mission 66, Wirth stressed the economic value of the national park system as an “important factor in the national economy.” He reported the American Automobile Association’s (AAA) and the National Association of Travel Organizations’ statistics and observations about increasing tourism in parks: “Pleasure travel is big business today.” He argued that “to the extent that we preserve them . . . and use them for their own inherent, noncommercial, human values, to that same degree do they contribute their part to the economic life of the nation.” In this way, Wirth framed the Mission 66 plan as an investment in the U.S. economy and said that he had “a realistic business plan,” but he did not present any cost estimates at the meeting.³⁸³

He connected the financial investment to an emotional one: “The way we use leisure will determine the kind of Nation we are tomorrow” and the national park system sets “a national pattern for the most wholesome and beneficial kind of recreation.” Wirth’s presentation ended with remarks about the National Park System fostering in Americans “pride in their government, love of the land, and faith in the American tradition,” that was “worth all that we need to spend.”³⁸⁴ Chairman Lon Garrison and committee member William Carnes then presented the more technical aspects of the program and privately met with superintendents.³⁸⁵

The Mission 66 Program, 1956–1966

Following a personal endorsement by President Eisenhower and approval by the Bureau of the Budget, federal appropriations for Mission 66, the largest investment ever initiated for the National Park System, were distributed in early 1956, and the program launched at the beginning of fiscal year 1957. Initially, Congress approved a ten-year budget of more than \$700 million, which would be achieved by increasing the 1957 fiscal year budget to \$68 million (a significant increase from the 1955 budget of \$32 million). By 1962, yearly NPS budgets exceeded \$100 million; by 1966, the NPS had spent a total of more than \$1 billion.³⁸⁶

³⁸² Wirth, *Parks, Politics, and the People*, 238.

³⁸³ Ethan Carr, *Mission 66*, 68, 87, 106–110.

³⁸⁴ Carr, *Mission 66*.

³⁸⁵ Carr, *Mission 66*.

³⁸⁶ Carr, Jackson-Retondo, and Warner, *The Mission 66 Era of National Park Development*.

Through Mission 66, the NPS brought national parks up to modern standards by initiating construction projects; hiring new employees; encouraging the development of campgrounds outside park boundaries; improving visitor access through interpretation; purchasing land for new parks; and creating a new identity for the agency, which involved increasing the use of its “arrowhead” logo (created in 1951) and updating uniforms. The new program involved every park in the system and dramatically improved facilities at most of them. Construction efforts included new and improved roads, trails, campgrounds, comfort stations, amphitheaters, administration buildings, and employee housing. Adequate water, sewer, and electric service were installed for the first time at many sites. The creation of “training centers” improved education for NPS staff. Major projects that had languished due to lack of funding, such as the St. Louis Gateway Arch and the 469-mile Blue Ridge Parkway, were completed, and 78 new parks were added to the system.³⁸⁷ The Historic American Building Survey (HABS) was reinstated as part of the Mission 66 program with guidance from Thomas Vint, a member of the steering committee and a landscape architect who had shaped the landscapes of national parks during the early park development period (1926–1942) discussed in Chapter Five.³⁸⁸

The system-wide construction of visitor centers was one of the most visible and important efforts undertaken during Mission 66. The NPS erected more than 100 such buildings nationwide between 1956 and 1966. The term “visitor center” emerged to identify a new type of NPS building designed to provide the primary introduction point for park visitors. Exhibiting modern architectural designs, the buildings provided a variety of amenities, including interpretive exhibits, museum space, theaters, public restrooms, and administrative offices for park staff. The centers replaced those buildings usually referred to as administration and museum buildings. A visitor center’s key functions were to introduce the story of the park and to orient visitors to the landscape and sites they were invited to explore. Owing to their importance to the visitor experience, considerable thought was given to their placement. The NPS usually chose prominent locations that allowed for extensive views of the park or site and that helped visitors understand the interpretive exhibits in the context of the entire site. Since most visitors arrived in automobiles, consideration was also given to placing the buildings as close as possible to the primary roadways leading to the parks and connecting them to the overall park circulation as a means to efficiently manage visitor traffic.³⁸⁹

Mission 66 era architecture is characterized by its Modern design (termed “Park Service Modern”) and use of readily available materials such as steel, concrete, aluminum, plywood, and fiberglass.³⁹⁰ Design elements include low-pitched, gabled roofs, wide overhanging eaves, and irregular fenestration. Park Service Modern was adapted from existing, popular mid-twentieth-century architecture. Visitor centers “had similarities to shopping centers and urban cultural centers,” since they “also sought to make centralized services accessible to large numbers of people in cars.”³⁹¹ The newly developed interstate highway system largely dictated Mission 66 era road design, which heavily influenced the location of park developed areas.

The Mission 66 program also focused on campground development and improvement. The number of campgrounds in national parks doubled as hundreds were built, providing 17,782 new campsites nationwide. Campgrounds established in the early park development period (1927–1942) were

³⁸⁷ C. Madrid French, “Mission 66: Modern Architecture in the National Parks,” accessed May 16, 2010, <http://www.mission66.com/mission.html>; Olausen et al., *National Register Nomination: Saratoga National Historical Park* (Washington, DC: National Park Service, 2011).

³⁸⁸ Charles A. Birnbaum and Mary V. Hughes, *Design with Culture: Claiming America’s Landscape Heritage* (Charlottesville, VA: University of Virginia Press, 2005), 168–174.

³⁸⁹ Allaback, *Mission 66 Visitor Centers*; Carr, *Mission 66*; Olausen et al., *Saratoga National Historical Park*.

³⁹⁰ Mission 66 era architectural descriptions in this section are adapted from Carr, Jackson-Retondo, and Warner’s *The Mission 66 Era of National Park Development*.

³⁹¹ Carr, Jackson-Retondo, and Warner, *The Mission 66 Era of National Park Development*.

improved to accommodate larger automobiles and Recreational Vehicles (RVs) with longer parking spurs (typically 25 feet). Campground planning continued to adhere to plant ecologist Meinecke's CCC-era modernization guidelines. The state-of-the-art campgrounds minimized impact on vegetation by keeping camping groups within tightly confined designated areas, with individual campsites organized on alternating sides of one-way loop roads. The newer campgrounds generally incorporated a greater number of sites within a single developed area to accommodate more campers, resulting in some alterations to the overall herringbone spatial arrangement. Mission 66 campsites tended to be more irregular and less dense than earlier ones. Mission 66 also provided the funds for extensive sewer and water systems that supported new comfort stations as well as electrical and water connections for trailer campers. Many Mission 66 campground designs also included covered or open amphitheaters for ranger-led interpretive programs. Landscape elements often included planting beds and signboards.³⁹²

Due to the rise in automobile tourism and day-trips, 743 picnic areas were constructed as part of the Mission 66 program, thousands of existing picnic areas were expanded, and many existing campground sites were modified into picnic areas. Picnic areas (either newly built or converted campgrounds) were designed to lessen environmental impacts by reducing visitor activity to day use only. Often, these areas were built alongside new and existing campground sites, visitor centers, interpretive displays, and circulation routes. Natural barriers such as ravines or creeks often separated picnic areas from adjacent campgrounds. Mission 66 picnic areas were constructed intentionally at a lower density than earlier ones by increasing the size of the picnic area. They resembled campgrounds in their layout, with paved loop roads, parking areas, and extensive sewer and water systems. Picnic sites typically consisted of a single fireplace and three picnic tables. Landscape features were often constructed with concrete, instead of the stone used in early park development picnic areas.³⁹³

The extensive Mission 66 visitor accommodation construction projects nationwide included 584 new comfort stations, 82 new amphitheaters or campfire circles, and 1,116 roadside or trailside interpretive exhibits. Mission 66 comfort stations employed a common form that consisted of separate sections for women and men separated by a shared, externally accessible plumbing chase. Some designs included an external privacy screen, while others contained an interior privacy panel located immediately inside the entrance. Standard comfort station designs included low-pitched gabled or hipped roofs. Fenestration typically consisted of continuous rows of jalousie, hopper, or awning windows just under the eaves. Stations were located in the most publicly accessible locations and typically surrounded by a paved apron accessed by paved pedestrian paths.³⁹⁴ Amphitheater designs typically followed the examples published in Volume II of Albert H. Good's *Park and Recreation Structures* (1938), which offered several variations on the form and overall encouraged designs "outstandingly representative of park character."³⁹⁵

Mission 66 campgrounds sometimes included ranger stations (also called campfinder residences) within the developed area. Ranger stations were also built near more remote areas within parks to provide visitor contact points along with an office and/or housing for law enforcement rangers. Like other employee housing constructed within national parks, ranger stations often followed standard housing designs based on elements of an established vocabulary for modern residential architecture. The low-profile, rectangular buildings featured flat or shallow gabled rooflines, wood frame construction with wood lap or vertical board siding or concrete masonry construction, slab on grade foundations, aluminum frame windows, and low masonry retaining walls. The building was typically

³⁹² Carr, Jackson-Retondo, and Warner, *The Mission 66 Era of National Park Development*.

³⁹³ Carr, Jackson-Retondo, and Warner, *The Mission 66 Era of National Park Development*.

³⁹⁴ Carr, Jackson-Retondo, and Warner, *The Mission 66 Era of National Park Development*.

³⁹⁵ Good, *Park and Recreation Structures*, 1938, Volume II, 197–212.

divided into two or three separate areas for each function. Comfort stations and maintenance areas were sometimes also located in proximity to ranger stations.³⁹⁶

To accommodate the large number of new employees at national parks (many located in rural areas) as part of the Mission 66 program, 743 new single and double housing units and 496 multiple housing units were constructed. Congress set maximum construction costs to be able to afford the new buildings, which were made using readily available materials and standard plans. Standard housing designs were issued in 1957 for one-, two-, three-, and four-bedroom buildings with low, rectangular-shaped, horizontal plans and built-up, flat and low-pitched roofs similar to residential architecture outside the park system. Many single-family units had carports or attached, enclosed garages. Aluminum-frame picture windows with sidelights were often used in the living room areas, with smaller windows in the bedrooms. Materials ranged from wood frame to fiberglass to masonry based on what was available in the area surrounding the park. Modifications to the standard housing designs occurred throughout the Mission 66 era. Residential areas were located away from public view and included curvilinear access roads and cul-de-sacs with short paved driveways or aprons leading to each residence.³⁹⁷

Under Mission 66, about 218 utility buildings were constructed within centralized maintenance areas that housed equipment and associated vehicles. Although constructed near employee housing areas, maintenance areas were intentionally screened from the public view by dense vegetation or natural topography. The larger maintenance buildings constructed under Mission 66 typically followed a standard rectangular form with a large equipment storage area and an attached shop, restroom, and tool room. These buildings were often constructed of concrete masonry units.

Prior to the Mission 66 era, national park roads were often congested with automobile traffic. To accommodate the steady rise in visits to national parks, existing roads were widened, parking areas were expanded, and bridges were replaced. Within the context of the environmental movement of the 1950s and 1960s, Mission 66 was a controversial program. Environmentalists were concerned that road construction would compromise the integrity of those parks that contained wilderness areas. Wirth and Vint argued that the laws that enabled the creation of national parks clearly stated that these properties were created “for the benefit and enjoyment of the people” and that public access was necessary to provide this service. Though he argued on behalf of the construction of roads for public accessibility, Wirth was adamant that Mission 66 should be viewed as a “conservation” program that preserved areas of wilderness.³⁹⁸

Despite significant road improvements, under Mission 66 policy, road construction was to be visually minimized to the public by the construction of retaining walls, tunnels, bridges, and natural-colored road surfaces. Standard Mission 66 designs for major and secondary roads were two-way and 22 feet wide, with, at maximum, a 3-foot paved shoulder. One-way roads were 12 feet wide with 2-foot shoulders, at maximum. Vegetation was used to screen ditches and shoulders from public view, and cut-and-fill slopes were rounded to look natural. Most road improvement during Mission 66 occurred on existing roadways: 1,570 miles of park roads were reconstructed. In most parks, a large portion of the budget was dedicated to road construction.³⁹⁹

³⁹⁶ Carr, Jackson-Retondo, and Warner, *The Mission 66 Era of National Park Development*.

³⁹⁷ Carr, Jackson-Retondo, and Warner, *The Mission 66 Era of National Park Development*.

³⁹⁸ Carr, Jackson-Retondo, and Warner, *The Mission 66 Era of National Park Development*.

³⁹⁹ Carr, Jackson-Retondo, and Warner, *The Mission 66 Era of National Park Development*.

George B. Hartzog, Jr.'s "PARKSCAPE, U.S.A," 1966–1972

Secretary of the Interior Stewart Udall (1920–2010) appointed George B. Hartzog, Jr., an NPS concessions lawyer and former superintendent of the Jefferson National Expansion Memorial, NPS Director in 1964 after Wirth's retirement. At the "Golden Anniversary Dinner" celebrating the 50th anniversary of the National Park Service (which coincided with the completion of Mission 66), Hartzog announced his own park development and expansion program, "PARKSCAPE, U.S.A." (Parkscape) or the "Centennial Challenge," to be completed by Yellowstone's centennial celebration in 1972. Though it had a new name, the program was essentially a continuation of the Mission 66 program to develop and expand the National Park System. Hartzog initiated the program to extend the increased funding from Mission 66 and restore the NPS image after environmental controversies. As outlined in Ethan Carr's book, *Mission 66*, "the [Parkscape] program had five major goals: 'completing' the park system by 1972; developing 'cooperative programs with other agencies'; 'utilizing the national park concept' to improve life in American cities; better 'communicating the values of park conservation'; and developing an international assistance program in anticipation of the second World Conference of National Parks, scheduled to be held in Yellowstone and Grand Teton in 1972."⁴⁰⁰

MISSION 66 PLANNING AT GREAT SMOKY MOUNTAINS NATIONAL PARK

Great Smoky Mountains NP, one of the most-visited parks in the system, featured prominently in Director Wirth's campaign to build support for the overall Mission 66 program, as a prime example of the need for capital investment. A June 1955 film showed footage of traffic backups at the Gatlinburg park entrance and on Newfound Gap Road, overcrowding at Smokemont Campground, and other signs of visitor congestion. Wirth unveiled his ambitious plans for tackling such problems at the NPS superintendents' annual meeting held that fall in Gatlinburg. He intended to have the entire program proposal, including draft prospectuses and budget estimates for most of the agency's parks and historic sites, completed by the end of the year to enable Congressional appropriations to begin as soon as possible. For the staff at Great Smoky, the program provided an unprecedented opportunity to request long-overdue funding for long-planned work.

Park Development, 1942–1955

Almost no development occurred at Great Smoky Mountains NP during World War II, and the park remained on essentially a wartime annual budget through 1947. In 1948, Congress allocated a modest amount of funding for rehabilitation that allowed the park to address its substantial backlog of maintenance projects. That year's work included construction of a ranger station at Twentymile and a short section of the Bryson City-Fontana Road (a.k.a., the North Shore Road or Lake View Road, never completed). Work resumed the following year on the road to Cades Cove (Laurel Creek Road), interrupted by the war but completed along with five bridges by 1951 (as discussed in Chapter Five). Increased lobbying by park boosters in both North Carolina and Tennessee succeeded in obtaining larger appropriations for the 1949 fiscal year that began to affect development in 1950. The park was able to pave the Cades Cove and Fighting Creek Gap roads, begin resurfacing the Newfound Gap and Clingmans Dome roads, construct three employee residences in the Sugarlands headquarters residential area, and initiate work on the Heintooga Ridge Road (a.k.a., Heintooga Round Bottom Road). A ceremony held at Heintooga Overlook on June 22, 1953, celebrated the completion of the 12-mile road along Heintooga Ridge (including the spur outside the park that connects the road to the Blue Ridge Parkway) together with the Balsam Mountain Campground and Heintooga Picnic Area.⁴⁰¹

⁴⁰⁰ Carr, *Mission 66*, 324–327, 326, 330.

⁴⁰¹ Catton, *A Gift for All Time*, 92.

Additional development work completed between 1954 and 1956 (prior to the acquisition of Mission 66 funds) included the construction of ranger station residences at Greenbrier, Tremont, and Cades Cove, campender residences at the Chimneys and Balsam Mountain campgrounds (including entrance roads, walks, and grounds at each residence), and paving of the Cades Cove Loop Road and Heintooga Ridge Road. By 1956, work was also underway on campgrounds at Cades Cove and Cosby and a maintenance area at Oconaluftee.⁴⁰²

Initial Planning for Mission 66

To prepare the Mission 66 prospectus for Great Smoky Mountains, Superintendent Edward A. Hummel compiled lists of development priorities for review by the regional NPS office throughout the second half of 1955. At the same time, the North Carolina and Tennessee park commissions prepared their own report on the park's most urgent needs, citing more campgrounds, increased personnel, road improvements, a museum at Oconaluftee, and an observation tower on Clingmans Dome. The final version of the Mission 66 prospectus for Great Smoky Mountains NP, completed on April 23, 1956, emphasized the park's wilderness values and proposed solutions for protecting those values while accommodating increased use. The plan treated the park area as core and periphery and located new development around the periphery to concentrate visitor use away from the wilderness core. It called for the construction of two new visitor centers within the park (at Sugarlands and Oconaluftee); the construction of four new campgrounds and eleven new picnic areas located along the park "fringes"; the expansion of two existing campgrounds (Smokemont and Cosby); numerous employee residences and ranger stations; and an extensive system of wayside exhibits and nature trails.⁴⁰³

The document resembled Mission 66 plans for other national park units in its treatment of the park infrastructure of roads, campgrounds, picnic areas, museums, and waysides as a circulatory system for cars, with developments planned to spread out use and encourage the even flow of movement throughout the park. The plan stated, "The entire journey through the park should thus become a continuous series of new pleasures." Unlike park plans that included new tour routes or thoroughfares, however, the Great Smoky Mountains NP prospectus did not propose major changes to the park's existing road system, instead focusing road construction projects on establishing new alignments to improve traffic flow and safety and short access roads into new developed areas. The park's initial draft of the prospectus included proposals for two new park roads (linking Cades Cove with Fontana Village and the Pigeon River to Cataloochee and Balsam Mountain), but the regional office tabled those suggestions pending the completion of the Foothills Parkway (authorized by Congress in 1944 as discussed below).⁴⁰⁴

The prospectus also recommended that development of suitable picnic areas and campgrounds outside the boundaries of Great Smoky Mountains NP would alleviate some of the congestion that compromised the visitor experience and infrastructure within the park. Superintendent Hummel noted the importance of such development in a speech about the Mission 66 prospectus:

In order for the Great Smokies to do what it is supposed to do we will also need additional recreational development adjacent to the park. We believe that additional campgrounds and picnic areas need to be developed in the forest areas adjacent to us. A great many people today drive to the park to picnic once or twice a week. They go there because it's the only place to go. If there were picnic areas closer by they would use those,

⁴⁰² Great Smoky Mountains National Park, *Mission 66 Prospectus* (Gatlinburg, TN: National Park Service, 1956), 121.

⁴⁰³ Catton, *A Gift for All Time*, 95–96; Great Smoky Mountains National Park, *Mission 66 Prospectus*.

⁴⁰⁴ Catton, *A Gift for All Time*, 96–97.

*and would come to the park probably several times a year just to enjoy the scenery and the mountains, but they would not come as often.*⁴⁰⁵

The North Carolina State Highway and Public Works Commission, the Tennessee State Department of Highways and Public Works, and the United States Bureau of Public Roads conducted a travel study of visitors to Great Smoky Mountains NP in 1956. The study found that most visitors traveled from cities within 500 miles of the park, where half the population of the United States lived. In 1947, the park hosted approximately 1,204,017 visitors; by 1956, the number skyrocketed to 2,885,819.⁴⁰⁶ The highway study corroborated the park staffs' knowledge that Great Smoky Mountains NP direly needed Mission 66 funding to alleviate the damage to park infrastructure caused by increasing visitation. The problem only worsened over the next few years, with visitor demand far exceeding the plan's expectations. The 1956 prospectus anticipated about 3.5 million visitors a year by 1965, but an estimated 4.5 million entered the park in 1960. The park's master plan update in April 1960 increased the projections to 4.625 million annual visitors by 1970, shown to be still a vast underestimation when more than that number visited the park in 1961. Nonetheless, development within Great Smoky Mountains NP through 1964, occurring as Mission 66 funding allowed, generally followed the objectives originally outlined in the 1956 prospectus and updated and refined in the 1960 Master Plan.⁴⁰⁷

DEVELOPMENT UNDER MISSION 66, 1956—1964

Major projects undertaken at Great Smoky Mountains NP during the Mission 66 period consisted of the construction of Clingmans Dome Observation Tower and the Sugarlands Visitor Center, the expansion and improvement of visitor accommodations (campgrounds and picnic areas) and park support facilities (employee residence and maintenance areas), and some road improvement and construction. Park Superintendent Hummel oversaw the work through 1958, followed by Fred J. Overly (superintendent from 1958 to 1963) and George W. Fry (superintendent from 1963 to 1969).

Clingmans Dome Observation Tower (Sevier County, TN/Swain County, NC)

NPS contractor Hubert Bebb, a Cornell-educated architect, designed the observation tower at Clingmans Dome, constructed in 1959 at the highest peak (6,643 feet) in the Great Smoky Mountains (Figure 7.1). The Park Service Modern, 45-foot-tall, reinforced concrete structure has a curvilinear pedestrian ramp, cylindrical column, and circular observation platform. When first proposed, the tower received mixed reviews from conservation groups and from the National Parks Association (NPA). While conservation groups were concerned about the development of the tower within the park's wilderness area, the NPA disapproved of the Modern design and materials and publicly criticized the structure in *National Parks Magazine*, calling it "flashy and conspicuous." Despite the disapproval, local contractor W. C. Norris of Waynesville, North Carolina, constructed the tower as planned on October 23, 1959.⁴⁰⁸

⁴⁰⁵ Great Smoky Mountains National Park, *Mission 66 Prospectus*; Edward A. Hummel, "Mission 66," 1956. Transcript of reel-to-reel audio of practice speech prepared for meeting of the Southeast Division of the American Automobile Association in Memphis, Tennessee. On file, Great Smoky Mountains National Park Archives, GRSM 23578.

⁴⁰⁶ North Carolina State Highway and Public Works Commission, Tennessee State Department of Highways and Public Works, and United States Bureau of Public Roads, *The Great Smoky Mountains National Park Travel Study, 1956* (1957). On file, Great Smoky Mountains National Park Archives, Management Files.

⁴⁰⁷ Catton, *A Gift for All Time*, 100; Great Smoky Mountains National Park, *Mission 66 Prospectus*, *Foothills Parkway*, *Great Smoky Mountains National Park* (Gatlinburg, TN: National Park Service, 1956); Great Smoky Mountains National Park, *Master Plan for the Preservation and Use of Great Smoky Mountains National Park* (Gatlinburg, TN: National Park Service, 1960).

⁴⁰⁸ Cynthia Walton, *National Register Nomination: Clingmans Dome Observation Tower* (Washington, DC: National Park Service, 2012); Anthony Wayne Smith, "Clingmans Dome," *National Parks Magazine* 33, no 137 (1959).

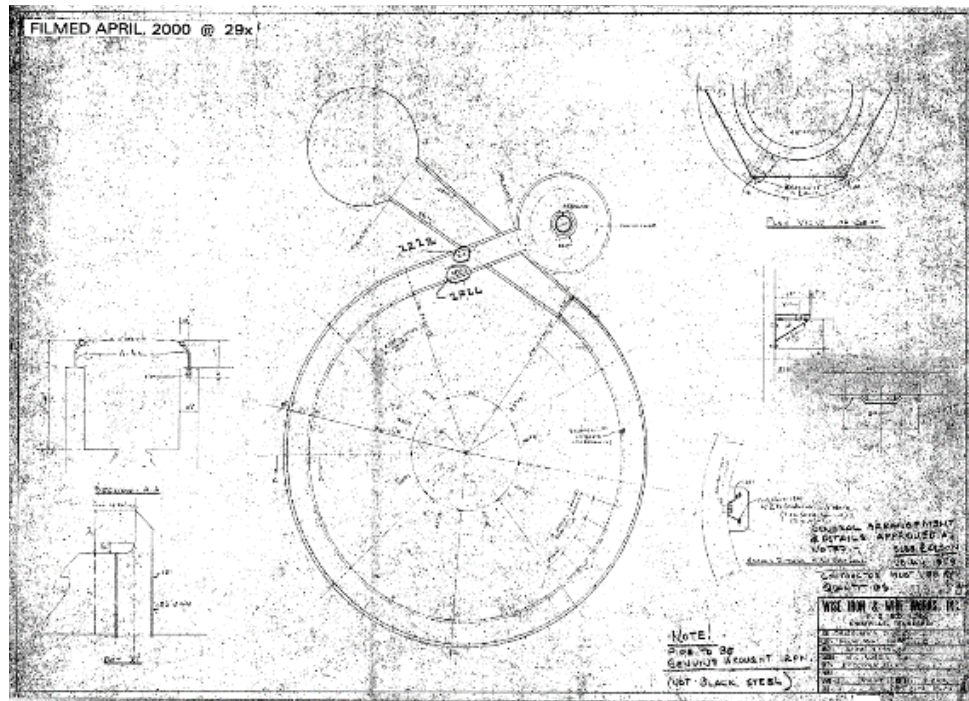


Figure 7.1. Observation Tower, Clingmans Dome, Great Smoky Mountains National Park (1958, Wise Iron & Wire Works Inc., Great Smoky Mountains NP archives).

Sugarlands Visitor Center (Sevier County, TN)

Robert E. Smith, Chief Architect of the Division of Architecture at the NPS Eastern Office of Design and Construction in Philadelphia, designed the Sugarlands Visitor Center, originally referred to as the Natural History Visitor Center (figures 7.2 and 7.3). The Williams Construction Company of Knoxville, Tennessee, constructed the building between 1958 and 1960. Dedicated on October 24, 1960, the unique building embodied many characteristics of other Mission 66 visitor centers while featuring rustic details to connect it to the adjacent 1930s headquarters building. The T-shaped floor plan housed separate functions in each wing: a reception lobby in the center, a small auditorium to the east, a natural history museum to the north, and offices and public restrooms in the west wing. Office, laboratory, and storage space for the natural history interpretation staff were housed in the basement. The Sugarlands Visitor Center received a national award from the American Institute of Architects in 1963.⁴⁰⁹

In 1988, the NPS constructed a comfort station to the west of the Visitor Center that conforms to the architectural style of the original building (for example, deeply overhanging gable ends above massive stone end walls), while allowing for the detached restrooms characteristic of many Mission 66 visitor centers. Substantial renovations to the building in 1999 included the addition of a large auditorium in a rectangular rear ell that extends diagonally to the northeast and a corresponding reconfiguration of the interior that included the conversion of the original auditorium wing to a bookstore. The rear ell matches the form and massing of the original building.

⁴⁰⁹ American Institute of Architects, *A.I.A. National Awards Program, 1963* (Washington, DC: American Institute of Architects, 1963).

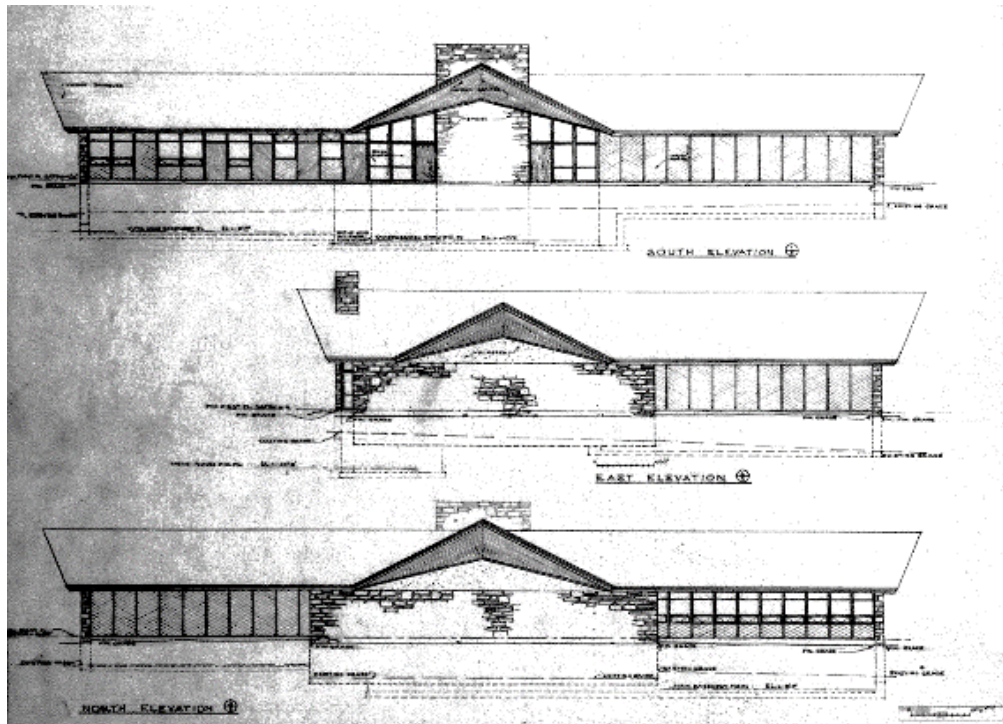


Figure 7.2. Sugarlands Visitor Center, North, East, and South Elevations, Great Smoky Mountains National Park (AIA National Honor Awards Program, 1963, Great Smoky Mountains NP archives).



Figure 7.3. Photograph, South Elevation, Sugarlands Visitor Center, Great Smoky Mountains National Park (AIA National Honor Awards Program, 1963, Great Smoky Mountains NP archives).

Visitor Accommodations and Day-use Areas

Government-managed visitor accommodations development between 1956 and 1964 consisted of the expansion of the existing campgrounds at Smokemont and Cosby and the construction of four new public use areas: a campground at Elkmont, picnic areas adjacent to the campgrounds at Cades Cove and Cosby, a combined campground and picnic area at Deep Creek, and a picnic area at Metcalf Bottoms.⁴¹⁰

The NPS expanded Smokemont Campground (Swain County, NC) between 1958 and 1959 through the addition of 43 campsites and a comfort station on the west side of Bradley Fork (an area designated for expansion in the 1930s plans), two comfort stations and a camp store/shelter (later removed) in the existing north section, an amphitheater shelter, and a camptender residence. The work also included some minor road reconfiguration. At Cosby Campground (Cocke County, TN), the first eighty-two sites were completed in 1956, as the Mission 66 prospectus was finalized. Over the next several years, development of the campground continued. By 1964, the campground consisted of 230 campsites, one hundred picnic sites, eight comfort stations, an amphitheater, and a camptender residence (figure 7.4). The Cades Cove Campground/Picnic Area (Blount County, TN), developed between 1953 and 1958, included 250 campsites, approximately fifty picnic sites, eight comfort stations, and a campground store and shelter. A visitor information kiosk for the Cades Cove area was also built in 1958 along the entrance road (rebuilt 2008). At Deep Creek (Swain County, NC), a small interim picnic area with one comfort station (built 1954, rebuilt 2010) and a picnic pavilion (built 1956) existed. By 1962, the NPS had enlarged the area to accommodate camping and picnic sites and added five comfort stations. Between 1960 and 1964, 340 campsites were developed at Elkmont Campground (Sevier County, TN), along with twelve comfort stations and an amphitheater (figure 7.5). At Metcalf Bottoms (Sevier County, TN), the NPS constructed a picnic area with five comfort stations between 1961 and 1962.

The 1956 Mission 66 prospectus also proposed that visitor accommodations managed by concessionaires—similar to those at Mt. Le Conte—be constructed at Hazel Creek, North Carolina, and Spence Field, Tennessee, as proposed in prior master plan studies. Neither of these operations was constructed.

Road Construction

Major road construction projects at Great Smoky Mountains NP under the Mission 66 program were limited to the improvement of existing roads, construction of the Roaring Fork Motor Nature Trail, and initial construction on the Foothills Parkway (not yet completed). Minor roads, such as entrance roads to and roads within new or improved developed areas, were also added to the park.

Road Improvements. Mission 66 funds enabled the NPS to begin addressing its backlog of road improvement and maintenance projects within the park. These included the rehabilitation of the Cades Cove Loop Road (1956; Blount County, TN); the installation of a concrete lining and portals in the upper tunnel on the Tennessee side of Newfound Gap Road (Morton Tunnel) and repair of two of the road's bridges across the West Prong of the Little Pigeon River (1958; Sevier County, TN); and the rebuild of the Parsons Branch Road bridges at Anthony Creek and Forge Creek (1963; Blount County, TN).⁴¹¹

⁴¹⁰ Great Smoky Mountains National Park, *Mission 66 Prospectus*, Great Smoky Mountains National Park, Foothills Parkway (Gatlinburg, TN: National Park Service, 1956); Catton, *A Gift for All Time*, 98.

⁴¹¹ Great Smoky Mountains National Park, *Cultural Landscape Assessment: Newfound Gap Road, Milepost 0.0 to Milepost 14.5*, Sevier County, TN (National Park Service, March 2008); Cornelius Maher and Michael Kelleher, "Great Smoky Mountains National Park Roads and Bridges, Newfound Gap Road, HAER No. TN-35-A," 1996, 72–77.

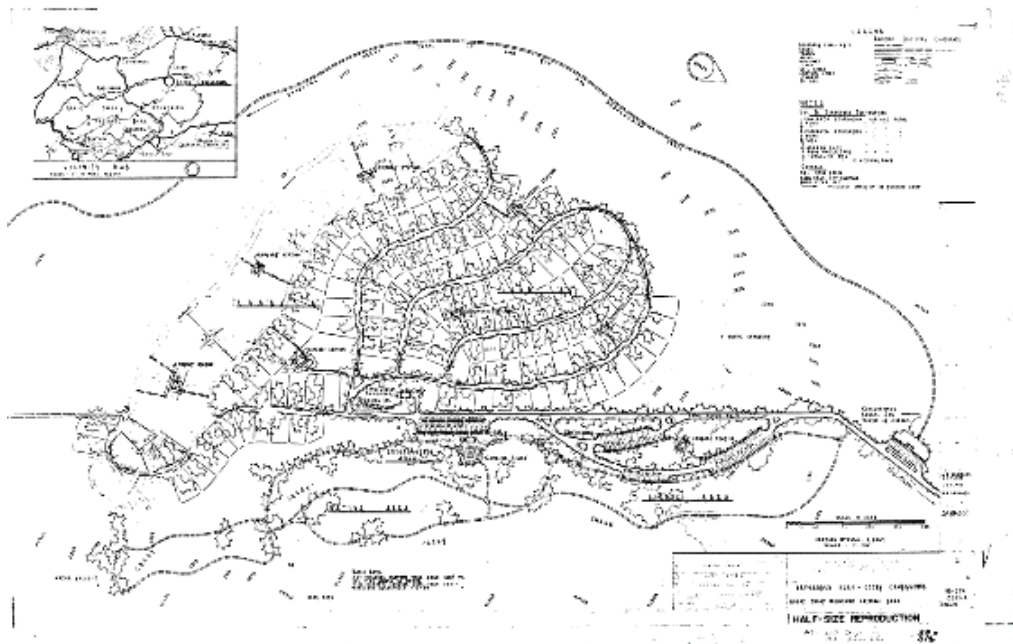


Figure 7.4. Developed Area – Cosby Campground, Great Smoky Mountains National Park (1956, Great Smoky Mountains NP archives).

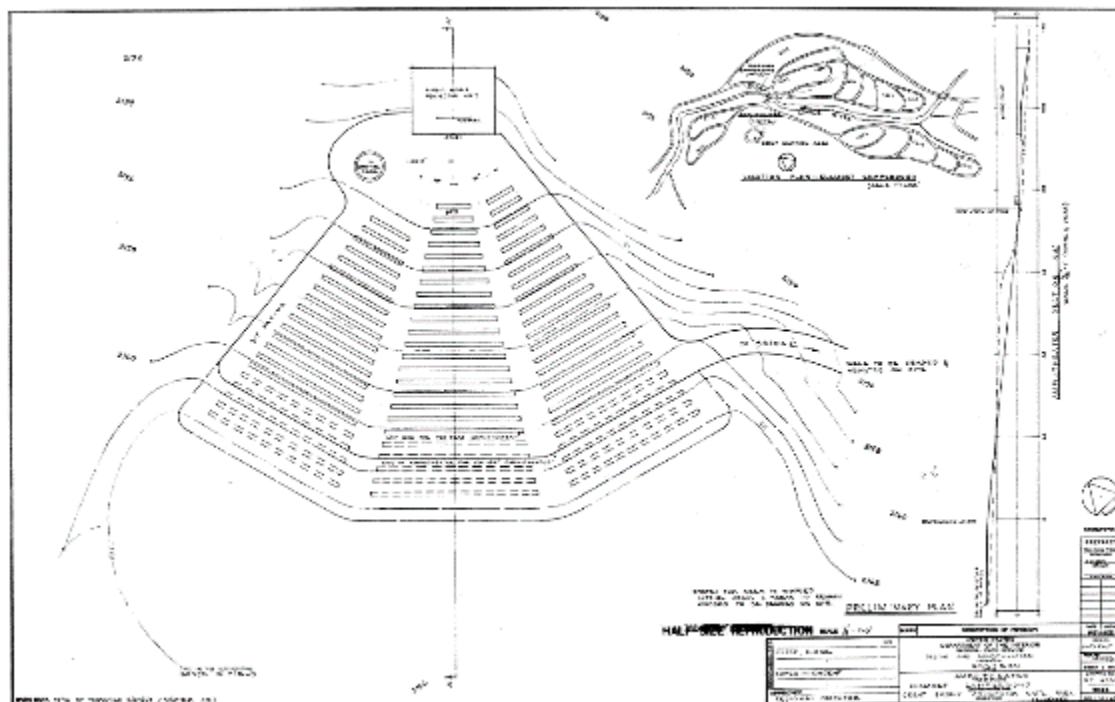


Figure 7.5. Amphitheater, Elkmont Campground, Great Smoky Mountains National Park (1964, Tauscher Simons, Great Smoky Mountains NP archives).

More substantial roadwork occurred on the North Carolina side of Newfound Gap Road (Swain County). Between 1958 and 1961, the park completed a reconstruction of the southernmost section of the road near Oconaluftee, with a short spur road built to connect to the Blue Ridge Parkway. At the opposite end, directly south of the gap, the NPS realigned the road beginning in 1961 to eliminate numerous tight turns and provide many new vistas for motorists. By incorporating an 800-foot section of the Clingmans Dome Road west of the gap into the reconfigured Newfound Gap Road, NPS engineers were also able to move the intersection of the two roads away from the congested parking area at Newfound Gap. The completion of the road relocation at Newfound Gap in 1965 enabled the NPS to begin the expansion of the parking plaza itself (see discussion below). After following a fishhook-shaped, southeast-trending route along Thomas Ridge for approximately four miles south of the gap, the reconfigured road then entered the valley of the Oconaluftee River and ran close to the old road to the vicinity of Kephart Prong. An additional five miles of road from Kephart Prong to Towstring Road was also improved. Standards of alignment and road bank naturalization for the new road section were similar to those in effect in the 1930s. The NPS used stone-faced road structures very similar in design to those erected during the initial period of park development before 1942. The stone was quarried at the Qualla Reservation of the Cherokee tribe adjacent to the park.⁴¹²

Roaring Fork Motor Nature Trail (Sevier County, TN). The connection of two existing roads, Roaring Fork and Cherokee Orchard, to create the unique Roaring Fork Motor Nature Trail (also known as the Roaring Fork-Cherokee Orchard Road) represented a compromise for wilderness enthusiasts and road boosters. The two original road segments were delineated just before and after the Civil War. At the start of the twentieth century, loggers significantly improved Roaring Fork Road; however, this road remained separated from Cherokee Orchard Road until the Mission 66 period. In February 1963, funds and labor provided by the Kennedy Administration's Accelerated Public Works Program allowed work to begin on the single scenic motor loop road—overlaid on the existing roads—envisioned by NPS staff based on input from the mayor of Gatlinburg, local hotel owners, and other community leaders. Although Mission 66 roads generally were widened significantly to relieve traffic, the NPS maintained the Roaring Fork Motor Nature Trail as a narrow motorway along a densely forested, undulating, and curvilinear path. The new sections, which included seven bridges, were constructed as single-lane spurs; Roaring Fork Road remained a narrow route free of shoulders; and Cherokee Orchard Road was widened slightly from 14 feet to 18 feet to accommodate two-way traffic.⁴¹³

The new loop route afforded automobile tourists close views of the area's natural resources, including tumbling streams, wildflowers, and hemlock groves. A 1963 *Motor News* article about the road construction said "by following the natural terrain . . . the National Park Service has made it possible for the visitors who couldn't even think of hiking to see, close up, just what the Smokies are made of."⁴¹⁴ Superintendent Fred J. Overly stated, "We look at this road as an automobile nature trail. On this new road we are making an effort to keep the natural wilderness as much as possible."⁴¹⁵ Conservationists continued to criticize the concept, however, stating "Nature trails, not motor trails, are what the park needs. . . The motor nature trail notion should be dropped." The NPS developed plans for a second motor nature trail at Great Smoky Mountains NP near Indian Creek but never implemented them, making the Roaring Fork road an almost unique example of the type.

⁴¹² Memorandum, R. A. Wilhelm, Landscape Architect, to Superintendent, Great Smoky Mountains National Park, June 7, 1957; Notice of Final Inspection, Realignment of Newfound Gap Road, October 5, 1964; "Cherokee-Newfound Link Completed," *Waynesville Mountaineer*, July 5, 1965; Cornelius Maher and Michael Kelleher, "Great Smoky Mountains National Park Roads and Bridges, Newfound Gap Road, HAER No. TN-35-A," 1996, 72–77.

⁴¹³ Maher and Kelleher, "Great Smoky Mountains National Park Roads & Bridges," 102–103.

⁴¹⁴ Maher and Kelleher, "Great Smoky Mountains National Park Roads & Bridges," 102–103.

⁴¹⁵ Maher and Kelleher, "Great Smoky Mountains National Park Roads & Bridges," _____

The Joppa Ridge Motor Nature Trail at Mammoth Cave National Park in Kentucky is possibly the only other example still extant in the national park system.⁴¹⁶

Foothills Parkway (Blount/Sevier/Cocke County, TN). Plans for the Foothills Parkway started as early as the 1930s, following the Congressional designation of the Blue Ridge Parkway in North Carolina and Virginia. Frank Maloney, vice president of the Great Smoky Mountains Association, and other park boosters began the push for a parkway through Tennessee to facilitate visitor access to the Great Smoky Mountains. In 1944, Congress approved a legislative boundary change that allowed the park to accept donations of land from the state of Tennessee for a scenic parkway roughly parallel to the park's north boundary, with an average right-of-way of 125 acres per mile over the length of the projected 70-mile road. Although the right-of-way was discontinuous to the majority of the park, it would connect to the park at the western end. Plans also included improved access to Gatlinburg and Pigeon Forge via a reconstruction of a portion of US 441 (the Gatlinburg Spur) and the construction of a 3-mile limited-access bypass around Gatlinburg into the park, both of which would be treated administratively as part of the Foothills Parkway. Right-of-way purchase began in 1947 and took 20 years to complete.⁴¹⁷

The Mission 66 program incorporated plans for the Foothills Parkway into its prospectus, dividing its construction into eight sections. A project to construct part of the Gatlinburg Spur began in 1957 and expanded from 1958 to 1960 to include the Bypass. Construction of the parkway itself began in February 1960 at Walland. By 1966, approximately one-third of the route was completed, including Section 8A, a 5.6-mile route from US Route 321 to Cosby; part of Section 8F, a 6.1-mile route from Carr Creek to Walland (not open to traffic); Section 8G, a 10.1-mile route from Walland to Look Rock; and Section 8H, an 11.1-mile route from Look Rock to Chilhowee Lake. Work on the project slowed after 1968. The State of Tennessee offered to construct part of the roadway and worked on Sections 8E and 8F from 1982 to 1989. Since 1989, the NPS and the Federal Highway Administration have directed further work on Sections 8E and 8F. Work is currently (2015) underway on several bridges in Section 8E.⁴¹⁸

Additional Development

To address the need for additional housing for park law enforcement, maintenance, and a limited group of seasonal staff, the 1956 prospectus proposed forty-five new single-family and nine to ten multiple-unit dwellings (forty units). Funding allowed the NPS to build about half the desired number of new residences between 1956 and 1964, including the following:

- three single-family houses near the Cades Cove Campground (Blount County, TN);
- one single-family house (a ranger station) near the Elkmont Campground (Sevier County, TN) and a duplex (seasonal quarters) inside the campground;
- four single-family houses and three multi-unit buildings (eight units total) in the residential area northwest of the Sugarlands administrative complex (Sevier County, TN) where three houses had been built in 1950;
- three single-family houses and a duplex around a cul-de-sac near the Cosby Campground (Cocke County, TN);
- seven single-family houses and three multi-unit buildings (eight units total) in a new residential area at Oconaluftee (Swain County, NC); and

⁴¹⁶ Catton, *A Gift for All Time*, 119–120.

⁴¹⁷ Catton, *A Gift for All Time*, 118–119.

⁴¹⁸ Great Smoky Mountains National Park, *Mission 66 Prospectus*.

- two single-family houses (a ranger station and a seasonal bunkhouse) near the Deep Creek Campground (Swain County, NC).

Almost all the single-family houses are standard Mission 66 ranches, typically 1,200 square feet with three bedrooms and an attached carport. The multi-unit dwellings resemble the single-family ranches in form and style, with the interiors divided into two to four one-bedroom apartments. The majority are wood frame construction with vertical board-and-batten or horizontal plank siding. Decorative split stone cladding is used on portions of the houses at Cades Cove and Oconaluftee. Several of the carports were later enclosed and converted to garages or additional rooms; shallow gabled roofs have replaced the original flat roofs on the carports at Oconaluftee. The siding on the residences at Cades Cove has been replaced with vinyl, and many of the windows on the residences at Oconaluftee are replacements. The four single-family houses at Sugarlands are concrete masonry construction and larger, built into gradually sloping sites that allowed for partially above-ground basements. They also deviate from the standard ranch-style form, featuring asymmetric end-gabled rooflines and floor-to-ceiling multi-light picture windows.

Mission 66 also funded the construction of additional buildings in the existing maintenance area at Sugarlands; permanent maintenance buildings to replace temporary ones at Oconaluftee and Cades Cove; and new maintenance facilities at Cosby. Like most Mission 66 maintenance buildings, these are masonry construction on concrete slabs, rectangular in form, with asphalt gabled roofs, steel doors, and aluminum windows. All have been altered since their construction.

REVISIONS TO PARK PLANNING AND DEVELOPMENT, 1964–1972

Annual visitation to Great Smoky Mountains NP grew by 263% between 1955 and 1970, when it reached 6,778,500, well over most park planner's expectations. By the mid-1960s, the NPS began to view the negative impacts of this increased usage as outweighing the benefits. At the same time, wilderness conservation advocates focused their efforts on limiting development within the country's largest eastern national park. The passage of the Wilderness Act in 1964, a landmark piece of legislation aimed at protecting wilderness lands in perpetuity, greatly aided conservationists and directly affected the future development of national parks. In addition to its other components, the act signed into law on September 3, 1964, gave the NPS ten years to recommend boundaries for wilderness area designations within all existing national parks. With respect to the Great Smoky Mountains in particular, Superintendent Fry assured local conservationist Harvey Broome in 1964, "We are operating under the philosophy that we need to preserve the wilderness aspects of the park, preserve the historical traditions, and define the limits beyond which we will not develop." Consequently, the 1964 version of the park's master plan presented a shift in the overall development approach, away from the initial Mission 66 paradigm based on visitor circulation through the park and toward a new one based on managing different zones within the park for different purposes.⁴¹⁹

In March 1964, newly appointed NPS Director George Hartzog created a Master Plan Study Committee for Great Smoky Mountains NP, with the goal of incorporating the wilderness review component of the pending Wilderness Act into the NPS master plan process for the first time. Superintendent Fry encouraged the committee to incorporate regional planning concerns in its recommendations. In particular, he advised the members to consider the potential for coordination with the US Forest Service, the agency that managed three national forests in the park's vicinity, and with several major highway developments underway nearby: the Gatlinburg Bypass, programmed but not yet completed; the Foothills Parkway, in the early stages of construction; and Interstate 40

⁴¹⁹ Catton, *A Gift for All Time*, 99–101.

between Knoxville and Asheville, nearing completion. The committee's preliminary study report pointed toward a new development planning synthesis based on management zones but included a listing of development projects that addressed park usage requirements consistent with earlier Mission 66 planning documents. The final report submitted to Hartzog in September 1964, after the committee received input from various community groups, instead organized its development proposals around the core concept of management zones focused on preservation and conservation rather than use. It also classified park lands according to the system recommended in a 1962 report published by the Bureau of Outdoor Recreation, beginning with Class V wilderness lands. Other zones identified in the report included Class VI historic areas, Class III recreation areas, and Class IV unique natural areas. The 1964 master plan differed most strikingly from the Mission 66-era development paradigm in its emphasis on limiting the most intensive use areas to the edges of the park rather than facilitating visitor circulation through the entire park. It included the following park-wide objectives, presented in language that made the overarching preservation goals clear:

- Develop visitor facilities and services in continuity and with caution, thus making it possible for people to see and enjoy, yet not destroy.
- Provide visitors with motor access to a representative cross section of the park's attractions [and] enable them to reach vantage points.
- Develop additional picnic areas to relieve scenic roadsides from the adverse impact of picnickers and return the roadways to their intended purpose of providing free-flowing traffic to promote scenic enjoyment.
- Perpetuate a part of the park as road-less wild lands of pristine nature for those visitors seeking an experience on nature's own terms.⁴²⁰

Although the plan included proposals for several large public use areas, including campground/picnic areas at Greenbrier and Cataloochee, funding ultimately allowed for only minimal development at Great Smoky Mountains NP between 1964 and 1972 (the end of Hartzog's Parkscape program). Completed projects included the conversion of the Chimneys Campground to a Picnic Area (essentially removing the stone fireplaces and campfire circle and relocating the campfinder residence to the Sugarlands headquarters area) and the construction of the Collins Creek Picnic Area (Swain County, NC), a comfort station at the Cades Cove Riding Stables (Blount County, TN), a duplex seasonal quarters near Elkmont Campground, and a large ranger station at the Oconaluftee maintenance area. Between 1964 and 1966, the NPS also widened and paved approximately five miles of the Cataloochee Road (a.k.a., Cataloochee Valley Road, located in Haywood County, NC) in anticipation of a proposed new access road connecting I-40 to Cataloochee, a project later abandoned as a result of local opposition.⁴²¹

As programmed earlier, the NPS expanded and reconfigured the Newfound Gap Parking Plaza between September 1965 and November 1967 to accommodate the larger size of postwar automobiles and increased visitation. By blasting away part of the mountainside on the west edge of the parking area (where a blasting scar remains), the NPS obtained an additional row of parking. The reconfiguration of the parking plaza eliminated the landscaped islands of the original design and resulted in the construction of some new stone walls and curbing that is of noticeably poorer quality than the CCC-period work. The substantial buttressed stone wall along the southeast edge of the plaza remains unaltered, however.⁴²²

⁴²⁰ Catton, *A Gift for All Time*, 106–111; Great Smoky Mountains National Park, *Great Smoky Mountains National Park Master Plan* (Gatlinburg, TN: National Park Service, 1964).

⁴²¹ Cornelius Maher and Michael Kelleher, "Great Smoky Mountains National Park Roads and Bridges, Cataloochee Valley Road, HAER No. TN-35-F," 1996, 3, 10.

⁴²² Cornelius Maher and Michael Kelleher, "Great Smoky Mountains National Park Roads and Bridges, Newfound Gap Road, HAER No. TN-35-A," 1996, 77–78.

The most substantial development during this period occurred along one of the completed sections of the Foothills Parkway, where the Look Rock Campground/Picnic Area (Blount County, TN) and a nearby maintenance area were built between 1965 and 1967. The area includes 120 picnic sites and 250 campsites arranged around the standard park one-way loop road, a kiosk at the entrance, four comfort stations, and an outdoor amphitheater. The dominant feature at the site is the Look Rock Observation Tower (figure 7.6), a reinforced concrete structure based on the 1959 tower at Clingmans Dome and one of three towers built at national parks in the Park Service Modern style. Sited atop the highest peak in the Chilhowee Mountain range (elevation 2,843 ft), the tower at Look Rock meets one of the stated goals for the Foothills Parkway project by providing “an appropriate view of the Great Smoky Mountains from the west.” NPS architect Ben Biderman prepared the drawings for the structure, which features a switchback ramp rather than the spiral one at Clingmans Dome and a cylindrical fire watch cab above the viewing platform. The overall proportions and construction materials of the Look Rock Tower clearly reference the design introduced at Clingmans Dome.⁴²³

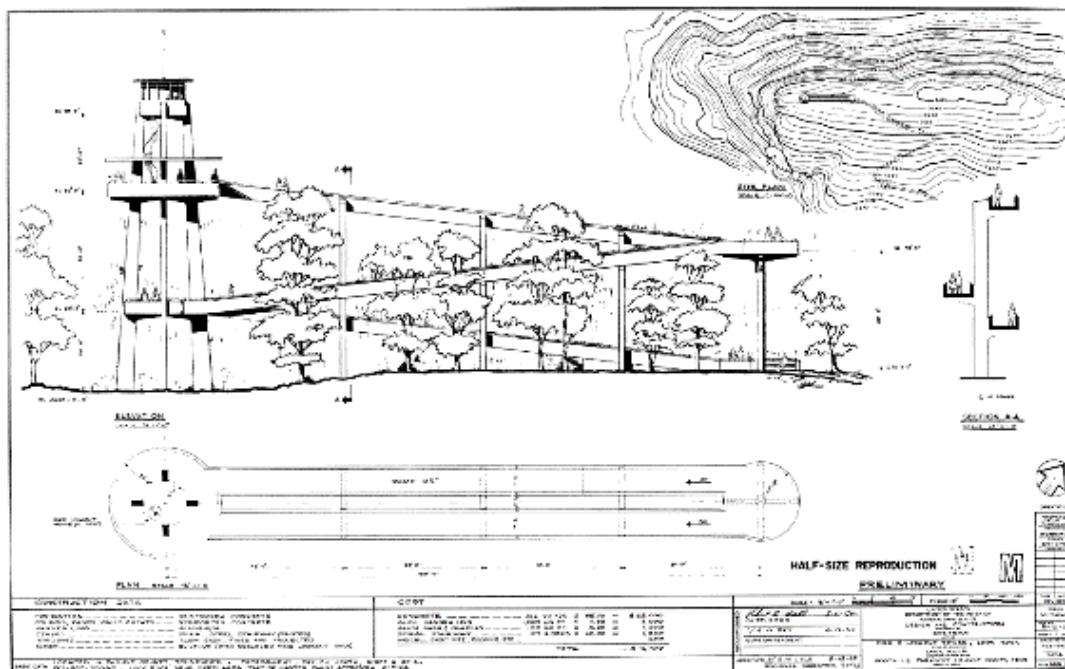


Figure 7.6. Look Rock Fire & Lookout Tower, Great Smoky Mountains National Park, August 1965 (1965, Great Smoky Mountains NP archives).

KNOWN RESOURCE TYPES

The resource types and registration requirements identified in this HRS are based on information presented in a 2006 draft Multiple Property Documentation Form (MPDF) prepared by Ethan Carr, Elaine Jackson-Retondo, and Len Warner for National Park Service Mission 66 Resources. Although it has not been approved by the Keeper of the National Register, the draft MPDF provides a thoroughly researched overarching context for Mission 66, identifies possible resource types associated with this context, and proposes guidelines for determining eligibility that are useful in evaluating the Mission 66 resources at Great Smoky Mountains NP. The document proposes an overall period of significance for Mission 66 era development that spans the years from 1945, when

⁴²³ Riley Hollenbaugh and Dale A. Ditmanson, *Look Rock Observation Tower and Campground, Determination of Eligibility* (Gatlinburg, TN: National Park Service, 2012); Walton, *National Register Nomination: Clingmans Dome Observation Tower*, 2012.

the post-World War II conditions that served as an impetus for the program first appeared, to the end of the Parkscape program in 1972. This period of significance is appropriate for Mission 66 era development at Great Smoky Mountains NP, which generally followed the same arc as the system-wide program.

At Great Smoky Mountains NP, the Mission 66 program did not represent the park's first development campaign, such as at Everglades or Big Bend national parks, or a major redevelopment campaign that drastically altered or reorganized the public experience of the park, such as at Yellowstone or Grand Canyon national parks. Rather, Mission 66 at Great Smoky Mountains NP provided the means for substantial improvements to the park infrastructure that built upon the framework of earlier planning effort. Thus, a parkwide Mission 66 historic district is not recommended. However, significant resources and developed areas within the park that are associated with the implementation of Mission 66 at Great Smoky Mountains NP can be considered eligible individually or as potential historic districts if they retain high integrity and embody the management goals of the Mission 66 program. Individual resources can also be considered eligible as contributing resources within a potential historic district.

The following major resource types associated with the development of Great Smoky Mountains NP from 1945 to 1972 have been identified: observation towers, visitor center areas, public use areas (campgrounds and picnic areas), roads, residential areas, and maintenance areas. Each major resource type subsumes a number of subsidiary resources, as described below. Trees, understory shrubs, ground cover, and lawns are integral parts of the landscapes of these resources. Where appropriate, these features are discussed. Further study and evaluation of these resource types as cultural landscapes should be undertaken by qualified historical landscape architects.

Observation Towers. This resource type covers resources developed for the purpose of presenting scenic views to visitors.

Visitor Center Areas. This resource type identifies areas within the park designed to provide essential administrative and visitor facilities. It includes visitor centers and associated buildings, structures, and landscape characteristics such as circulatory roads and parking areas.

Public Use Areas (Campgrounds and Picnic Areas). This resource type covers major developed areas intended for public use and containing a range of representative facilities that embody the goals of the Mission 66 program. It may include campgrounds, picnic areas, related loop roads, comfort stations, drinking fountains, amphitheaters, stores, and ranger stations.

Roads.⁴²⁴ This resource type covers newly constructed or rebuilt motor roads making up the circulation system of the park that reflect the influence of Mission 66 road design and construction policies. It includes major park roads that provide entry to the park or access to scenic features and recreational areas within the park. The resource type encompasses the roads and road banks, as well as such associated features as bridges; culverts and drains; tunnels; guardrail and barriers; tree wells; and pull-offs, including curbing, retaining walls, and sidewalks.

Residential Areas. This resource type covers the development of employee housing. It includes single-family and multi-unit residences, garages, curvilinear roads, curbing, and sidewalks.

⁴²⁴ Although a complete evaluation of all roads and trails within the park is beyond the scope of this HRS, major roads associated with the park development contexts are addressed. Primary components of other resource types, such as campground loop roads, are also addressed within the discussions of the associated resource.

Maintenance Areas. This resource type covers the development of centralized locations for maintenance vehicles and equipment. It includes maintenance buildings and structures, roads and associated features, curbing, and sidewalks.

The resource types listed above may be eligible for listing in the National Register under Criterion C because they embody the distinctive mid-twentieth-century modern design principles and construction techniques (Park Service Modern) practiced by NPS architects, landscape architects, planners, and historians during the Mission 66 era. They are also potentially eligible under Criterion A as examples of the evolution in national park planning and development that occurred during the Mission 66 era as the NPS attempted to revive national park infrastructure and improve visitor services and recreational opportunities.

To qualify for National Register listing under this context, resources must have been constructed between 1945 and 1972 and possess strong associations with Mission 66 era development at the park as outlined in this chapter. They must represent substantial completed development projects included in the park's 1956 prospectus for Mission 66 (or subsequent planning documents prepared during the Mission 66 period) that addressed the Mission 66 program goals such as improved visitor facilities or park infrastructure. For resources to be eligible under Criterion C, they must adhere to the Mission 66 modern design philosophy prevalent in the 1945 to 1972 period that emphasized low-pitched gable roofs and readily available materials such as steel, plywood, fiberglass, and concrete. Resources should retain most, if not all, aspects of integrity. Roads that have been widened and resurfaced may be eligible if they maintain their original alignments and bank treatment and provide the same sequence of visual experiences as when first constructed. Campgrounds and picnic areas with replacement picnic tables or other materials would not likely disqualify public use areas from eligibility. Preparation of a National Register nomination that includes Mission 66 resources would require a careful study of integrity at the time of listing to determine contributing/non-contributing status. Utility systems built under Mission 66 (water treatment, sewerage, electric and phone lines, etc.) are not considered as potentially eligible resources. Resources that are less than fifty years old must meet Criteria Consideration G to be considered eligible for listing. Resources programmed and begun under Mission 66 but only partially completed will not be eligible for listing under this context.

CHAPTER EIGHT: NATIONAL REGISTER OF HISTORIC PLACES EVALUATIONS

This chapter presents National Register of Historic Places evaluations for Great Smoky Mountains NP resources related to the thematic contexts presented in Chapters Two through Seven. The current status of resources previously listed in or determined eligible for listing in the National Register is provided, along with recommendations for changes to the National Register eligibility, as appropriate.

Depending on park planning priorities, individually significant resources may be nominated and listed in the National Register either on their own or as part of historic districts. Some may also be eligible for listing in the National Register under multiple contexts. To support the NPS' planning objectives, and to eliminate redundant discussions of individual resources and eligibility, the National Register results and recommendations of the HRS are organized in this chapter into suggested historic districts and individual nominations. Where possible, resource types that are eligible for listing under the same National Register criteria are also grouped.

Resources are organized according to their National Register status as follows: 1) properties currently listed in the National Register; 2) properties determined or recommended eligible for listing in the National Register; 3) resources determined or recommended ineligible for listing in the National Register; and 4) archeological or related resources requiring further study. Where possible within each section, the properties are organized geographically by county, beginning in Blount County, Tennessee, and moving clockwise through the park. Appendix A provides copies of National Register documentations and determinations of eligibility. Appendices B and C (organized geographically to match the organization of this chapter) tabulate, map, and describe the resources currently listed in or determined or recommended eligible for listing in the National Register, as well as special archaeological landscapes containing resources that need additional study.⁴²⁵ Appendix D (organized alphabetically) tabulates and describes all resources that are ineligible for listing in the National Register. Appendix E (organized by FMSS ID number) provides a comprehensive table of all resources evaluated by this HRS.

RESOURCES LISTED IN THE NATIONAL REGISTER

Historic Districts

Cades Cove Historic District (Blount County, TN). National Register documentation for the Cades Cove Historic District (NRIS #77000111) was accepted July 13, 1977, and amended in November 1977. The district's identified areas of significance are Agriculture and Architecture (Criteria A and C). The documentation listed 30 contributing resources:

- John Oliver Cabin;
- Elijah (Leige) Oliver Cabin;
- Elijah Oliver Barn;
- Elijah Oliver Corn Crib;
- Elijah Oliver Smokehouse;
- Elijah Oliver Springhouse;

⁴²⁵ National Register boundaries shown in Appendix B and C are approximate, based on the location of contributing resources within each listed, determined, or recommended National Register property. Final National Register boundaries will be studied and established in the course of preparing National Register nominations to be submitted under the park-wide MPDF.

- Cades Cove Primitive Baptist Church;
- Cades Cove Methodist Church;
- Cades Cove Missionary Baptist Church;
- John P. and Becky Cable House;
- John P. Cable Corn Crib;
- John P. Cable Smokehouse;
- John P. Cable Overshot Mill;
- John P. Cable Barn;
- John P. Cable Blacksmith Shop;
- John P. Cable Drive-Through Barn;
- Dan Lawson (Peter Cable) House;
- Dan Lawson (Peter Cable) Smokehouse;
- Dan Lawson (Peter Cable) Granary;
- Henry Whitehead House;
- Henry Whitehead Smokehouse;
- Noah Birchfield Pig Pen (removed);
- Tipton-Oliver House;
- Tipton-Oliver Blacksmith Shop;
- Tipton-Oliver Apiary;
- Tipton-Oliver Corn Crib;
- Tipton-Oliver Woodshed;
- Tipton-Oliver Smokehouse;
- Tipton-Oliver Barn; and
- Carter Shields Cabin.

The following amendments to the Cades Cove Historic District documentation are recommended:

- Three buildings should be added as contributing resources to the Cades Cove Historic District under the settlement and community development and architecture contexts: the Dan Lawson Barn (1900–1920), the John W. Oliver Barn (a.k.a., Hugh Myers Barn, 1930), and the Primitive Baptist Church Cistern House (1890–1910).
 - The Dan Lawson Barn represents the ongoing evolution of Cades Cove as an agricultural settlement into the twentieth century. It is significant at the local level under National Register Criterion A within this context as tangible evidence of the later development of Cades Cove, the largest community incorporated into the national park established in the Great Smoky Mountains. The Dan Lawson Barn is also locally significant under Criterion C as an example of the vernacular architecture of farm outbuildings in the Upland South, specifically the transverse crib barn type that was carried over largely unchanged from log construction to frame construction.
 - The John W. Oliver Barn is eligible for listing in the National Register under Criterion C and Criteria Consideration B: Moved Properties in the area of architecture as an example of the farm outbuilding type executed with a frame structural system and transverse runway that represents the evolution of agricultural architecture in the

region from log to frame construction. The building has been identified as a contributing resource within the Elijah Oliver Homestead cultural landscape.⁴²⁶ The John W. Oliver Barn is not eligible under Criterion A because it has been moved to its present location and no longer conveys its associations with the twentieth-century history of Cades Cove.

- The Primitive Baptist Church Cistern House is an outbuilding constructed within three decades of the Primitive Baptist Church.
- Two roads should also be added to the district. Parsons Branch Road (built 1861) and Rich Mountain Road (built 1839–1840, improved 1925) are eligible for listing in the National Register under Criterion A as resources having important associations with the growth of the Cades Cove community in the late nineteenth and early twentieth centuries. The Cades Cove CLI identifies these roads as resources that contribute to the district’s significance. There is no complete inventory of bridges, culverts, and other associated features for either road that would allow for an assessment of its significance under Criterion C in the area of engineering. Therefore, a CLI for each roadway is recommended to identify such associated resources. The CLI should also identify non-road-related structures and features such as cemeteries, fences or stone walls, and ruins—that may be adjacent to the roadway corridor. A road with a sufficient density of such resources may qualify for listing in the National Register as a separate historic district.
- Five moved resources are currently included as contributing resources in the National Register documentation for Cades Cove: the John P. and Becky Cable House (moved 1955–1956), John P. Cable Barn (moved 1936–1938), John P. Cable Drive-Through Barn (moved 1956), John P. Cable Corn Crib (moved 1937–1938), and John P. Cable Smokehouse (moved 1956–1958). These resources should not be considered eligible for National Register listing under Criterion A as their associations with the settlement and community development of Cades Cove are negated by their lack of integrity of location. However, the five resources are likely eligible under Criterion C and Criteria Consideration B: Moved Properties. The John P. and Becky Cable House is a representative nineteenth-century example of the I-house type, an important vernacular form in the Upland South. The barns are examples of the drive-through and cantilever types, and the corn crib and smoke house appear to be well-preserved examples of their respective agricultural resource types. The nomination amendment should include data concerning the methods employed during the NPS movement of the resources and a discussion of integrity to justify their qualification for National Register listing under Criteria Consideration B.⁴²⁷
- Five reconstructed properties are listed as contributing resources in the Cades Cove Historic District: the John P. Cable Blacksmith Shop (reconstructed 1956–1958, rehabilitated 1966–1967), Tipton-Oliver Barn (reconstructed 1968), Tipton-Oliver Apiary (reconstructed 1959), Tipton-Oliver Woodshed (reconstructed 1965), and Tipton-Oliver Corn Crib (reconstructed

⁴²⁶ National Park Service, *Cultural Landscapes Inventory: Elijah Oliver Homestead* (Atlanta, GA: Southeast Regional Office, 1998).

⁴²⁷ According to National Register Federal Program Regulations (36 CFR Part 60), a property listed in the National Register prior to December 13, 1980, may be removed from the National Register only if “the property has ceased to meet the criteria for listing in the National Register because the qualities which caused it to be originally listed have been lost or destroyed, or such qualities were lost subsequent to nomination and prior to listing.” The following legislated grounds for removal of properties from the National Register do not apply for properties listed prior to December 13, 1980:

additional information shows that the property does not meet the National Register criteria for evaluation;
error in professional judgment as to whether the property meets the criteria for evaluation; or
prejudicial procedural error in the nomination or listing process.

Recommendations in this HRS concerning amendments to properties listed in the National Register before December 13, 1980, should be interpreted within this regulatory framework (National Register Federal Program Regulations, Title 36, Chapter 1, Part 60, Sec. 60.15).

1966). Reconstructed properties must meet the requirements of Criteria Consideration E, which states that reconstructed properties are eligible when they are “accurately executed in a suitable environment *and* presented in a dignified manner as part of a restoration master plan *and* when no other building or structure with the same associations” survives. The Barn, Corn Crib, and Woodshed are less than 50 years of age, while the Apiary and Blacksmith Shop are more than 50 years old. The Tipton-Oliver Woodshed and Apiary do not meet National Register standards for reconstructions and, therefore, do not contribute to the district’s significance within the settlement and community development context.⁴²⁸ The Barn, Corn Crib, and Blacksmith Shop should continue to be listed as contributing resources within the Cades Cove Historic District for their significance under the settlement and community development context, but the updated National Register nomination should invoke Criteria Consideration E and provide supporting documentation.

- The Cades Cove Historic District’s significance under Criterion A within the early park preservation context should be added to the documentation. The district primarily depicts the park’s early interpretations of the cove’s pioneer settlement era. The NPS included an outdoor museum at Cades Cove in the earliest master plans for the park and funded the restoration and rehabilitation of the log buildings in the cove before those in other areas of the park. In addition, the park directed substantial effort to the construction of the loop road that facilitated visitor access to the cove’s historic sites. The CCC restoration of the Cable Mill in 1936 is significant as an early example of a living history museum in the national park system. The operating grist mill became the focal point for the subsequent development of the surrounding area. The concept of an outdoor museum composed of restored and relocated buildings in Cades Cove served as a model for other projects of the same type at Great Smoky Mountains NP and other national parks.

The following resources contribute to the significance of the district under the early park preservation context:

- Cades Cove Loop Road;
- John Oliver Cabin;
- Elijah (Leige) Oliver Cabin;
- Elijah Oliver Barn;
- Elijah Oliver Corn Crib;
- Elijah Oliver Smokehouse;
- Elijah Oliver Springhouse;
- John W. Oliver Barn;
- Cades Cove Primitive Baptist Church;
- Cades Cove Methodist Church;
- Cades Cove Missionary Baptist Church;
- John P. and Becky Cable House;
- John P. Cable Corn Crib;
- John P. Cable Smokehouse;
- John P. Cable Overshot Mill;
- John P. Cable Barn;
- John P. Cable Blacksmith Shop;
- John P. Cable Drive-Through Barn;

⁴²⁸ They cannot be removed from the National Register, however, as explained in the previous footnote.

- Dan Lawson (Peter Cable) House;
- Dan Lawson (Peter Cable) Smokehouse;
- Dan Lawson (Peter Cable) Granary;
- Henry Whitehead House;
- Henry Whitehead Smokehouse;
- Tipton-Oliver House;
- Tipton-Oliver Blacksmith Shop;
- Tipton-Oliver Apiary;
- Tipton-Oliver Corn Crib;
- Tipton-Oliver Woodshed;
- Tipton-Oliver Smokehouse;
- Tipton-Oliver Barn; and
- Carter Shields Cabin.

The six relocated resources at Cades Cove (the John W. Oliver/Hugh Myers Barn, John P. Cable Barn, John P. and Becky Cable House, John P. Cable Drive-Through Barn, John P. Cable Corn Crib, and John P. Cable Smokehouse) discussed above contribute to the Cades Cove Historic District under Criterion A within the early park preservation context and retain integrity to that period. Five reconstructed resources (presently listed as contributing and discussed above) located within the Cades Cove Historic District are eligible as contributing resources with significance under Criterion A within the early park preservation context. Of these, the John P. Cable Blacksmith Shop and Tipton-Oliver Apiary are over 50 years old and, thus, do not need to meet Criteria Consideration E for reconstructed properties within this area of significance. The Tipton-Oliver Woodshed, Corn Crib, and Barn are less than 50 years old but meet Criteria Consideration E for reconstructed properties. The Sorghum Furnace and Mill built at Cades Cove in 1959 is not eligible for listing in the National Register under any of the criteria because it has been rebuilt several times since and lacks integrity.

- The Noah Birchfield Pig Pen should be removed as a contributing resource because it is no longer extant.
- The Caughron Barn (1910), which had previously been considered eligible for listing in the National Register as a contributing resource to the district, was destroyed by high winds in 2009.
- The Cable Mill Visitor Center, constructed in 1972, and the Cable Mill Comfort Station, constructed in 1974, should be noted as non-contributing resources within the historic district that do not detract from its overall integrity.

Aside from the loss of the Noah Birchfield Pig Pen, the Cades Cove Historic District retains its integrity as a collection of primarily late nineteenth- and early twentieth-century buildings and structures set within the landscape of Cades Cove. The Dan Lawson Barn exhibits integrity of location, design, feeling, and association. Integrity of setting is somewhat compromised in that the corn crib and spring house have been removed. As noted above, the John W. Oliver Barn does not retain integrity of location or association, having been moved in the late twentieth century. Its integrity of design and materials is compromised by the use of a poured concrete foundation, but it retains sufficient integrity of design, workmanship, materials, and feeling to convey its significance under Criterion C. The Primitive Baptist Church Cistern House is comparable in style and materials to the church and retains its integrity.

Roaring Fork Historic District and Alex Cole Cabin (Sevier County, TN). National Register documentation for the Roaring Fork Historic District (NRIS #76000170) was accepted March 16, 1976. The documentation identified six contributing resources: the Ephraim Bales House, Ephraim Bales Barn, Ephraim Bales Corn Crib, Ephraim Bales Pig Pen, Alfred Reagan House, and Alfred Reagan Tub Mill. The following amendments to the Roaring Fork Historic District documentation are recommended:

- Four settlement-era resources should be added as contributing resources within the historic district: the Ephraim Bales Stone Walls, Jim Bales Barn, Jim Bales Corn Crib, and Alex Cole Cabin. The stone walls are important landscape features of the farmstead that help convey an idea of how functionally distinct areas were separated. In the vicinity of the Jim Bales Barn and Corn Crib, the district has lost some integrity of setting, feeling, and association owing to the loss of the Bales house and other farm outbuildings (prior to listing in the National Register). Nonetheless, the barn and corn crib retain sufficient integrity to convey substantial information about the semi-subsistence agricultural lifestyle of Smokies families and are good examples of hewn-log construction.
- The historic district's areas and period of significance should be amended to include its significance under Criterion A within the early park preservation context. The Ephraim Bales House, Ephraim Bales Barn, Ephraim Bales Corn Crib, Ephraim Bales Pig Pen, Jim Bales Barn, Jim Bales Corn Crib, Alfred Reagan House, and Alfred Reagan Tub Mill were all identified in early park documents relating to the preservation program and included in restoration projects funded in the 1940s and 1950s.
- The Alex Cole Cabin (NRIS #76000165) was listed in the National Register on January 2, 1976, while it stood in its original location in the Sugarlands section of the park. In 1978, the cabin was moved to its present location in the Roaring Fork Historic District.⁴²⁹ Although moved structures are in general not eligible for National Register listing, the Cole Cabin qualifies for listing in the National Register under Criteria Consideration B: Moved Properties because it is significant in the area of architecture as an excellent example of log construction, using especially wide hewn chestnut logs. The aspects of integrity necessary to convey this significance are retained. The cabin also contributes to the significance of the district under the early park preservation context as it was identified in early park documents relating to the preservation program and included in restoration projects funded in the 1940s and 1950s.
- The Roaring Fork-Cherokee Orchard Road (a.k.a., the Roaring Fork Motor Nature Trail), constructed in 1963, should be added as a contributing resource under the Mission 66 park development context. As an intact, well-preserved example of a unique type of day-use development, the road addresses the primary goals of the Mission 66 program by providing improved visitor access to significant park resources while retaining the isolated, rural character of the narrow historic roadways. The road symbolizes a positive result of the communication between wilderness advocates and Mission 66-era park managers. It is also a rare example within the national park system of the "motor nature trail" resource type. No substantial realignment or reconstruction of the roadway has occurred since its initial construction.⁴³⁰

⁴²⁹ As required by National Register Federal Program Regulations (36 CFR Part 60.14b(5)), consultation occurred prior to the relocation of the cabin that resulted in a draft Memorandum of Agreement prepared by the Advisory Council on Historic Preservation. Documentation of the consultation exists in the Cultural Resource Management office files at Great Smoky Mountains NP.

⁴³⁰ Catton, *A Gift for All Time*, 120.

Junglebrook Historic District (Sevier County, TN). Documentation for the Junglebrook Historic District (Bud Ogle Farm) was accepted by the National Register on November 23, 1977 (NRIS #77000158). Resources listed consist of the Noah (Bud) Ogle House, Noah (Bud) Ogle Barn, and Noah (Bud) Ogle Tub Mill. Amendments to the historic district are recommended as follows:

- Two parallel stone walls that were part of the farmstead should be added to the property as contributing resources. The walls are approximately 4 feet high and from 36 to 40 feet long. The walls are locally significant under National Register Criteria A and C as important surviving landscape features of the farmstead complex. They demonstrate how settlers made use of local materials like fieldstone to put an individual stamp on their properties and used walls and fences to separate functionally distinct areas of the farm. The fieldstone walls exhibit a substantial degree of integrity of location, setting, workmanship, materials, feeling, and association.

The Junglebrook Historic District documentation should be revised to include the district's significance under Criterion A within the early park preservation context. The Noah (Bud) Ogle House, Noah (Bud) Ogle Barn, and Noah (Bud) Ogle Tub Mill were all identified in early park documents relating to the preservation program and included in restoration projects funded in the 1940s and 1950s. Although plans to move other buildings into this area were never implemented, the three associated buildings form an outdoor field museum that clearly conveys the preservation philosophy of the initial park development period.

Tyson McCarter Place (Sevier County, TN). The Tyson McCarter Place (NRIS #76000204) was entered in the National Register as a site on March 16, 1976, and includes three contributing resources—the Springhouse, Barn, Corn Crib, and Smokehouse. The property is significant under Criteria A and C in the areas of agriculture and architecture. The following amendments to the existing historic district registration are recommended:

- Two resources should be added as contributing resources within the site: the ruins of the Tyson McCarter Cabin and the remains of rock walls that were part of the farmstead. The cabin ruins consist of two 9-foot-tall fieldstone chimneys, located approximately 30 feet apart. The walls are 3 to 4 feet tall and probably originally served to keep free-ranging livestock away from crops and gardens. These features add to an understanding of how the farm as a whole functioned in the historic period. They are locally significant under Criterion A because they represent both the settlement patterns of the region and are examples of vernacular building practices. The cabin ruins possess sufficient integrity as ruins to convey important information about the placement of the cabin in relationship to other outbuildings. The rock walls possess a high degree of integrity: they are in their original locations and give a strong sense of the use of locally available materials (fieldstone) and folk patterns of laying up walls.

The registration documentation should be amended to include the site's significance under Criterion A within the early park preservation context. Although plans to relocate the resources at this site to a more visible area within the park were never implemented, the buildings and structures were rehabilitated in 1948. The site retains integrity as an outdoor field museum established during the initial park development period and conveys the prevailing preservation philosophy of that time.

Elkmont (Sevier County, TN). The Elkmont Historic District (NRIS #94000166), comprising approximately 516 acres, was listed in the National Register on March 22, 1994. That nomination identified fifty-six contributing and twenty-eight non-contributing resources. In 2001, following the expiration of the final private leases at Elkmont, the NPS began a public Environmental Impact Statement (EIS)/General Management Plan (GMP) Amendment process to investigate alternatives to the complete removal of all buildings at Elkmont specified in the 1982 GMP for Great Smoky

Mountains NP. The seven alternatives considered ranged from the complete removal of all buildings to the preservation and rehabilitation of all but one of the contributing buildings and most of the non-contributing buildings for operation as a restaurant and to provide overnight lodging. The final Memorandum of Agreement (MOA) (executed in 2009 between the NPS, the Tennessee State Historic Preservation Officer, and the Advisory Council on Historic Preservation) and the Record of Decision (ROD) signed by the Director of the NPS Southeast Regional Office on June 30, 2009, provide details on the selected alternative and guide the park's management of all resources at Elkmont.⁴³¹

The selected alternative, to be implemented by the NPS over a multi-year period, includes the preservation of the following resources in the Appalachian Club area of the Elkmont Historic District:

- the 1934 Appalachian Clubhouse;
- sixteen cabins within the “Daisy Town” community;
- the Spence Cabin along “Millionaires’ Row,” a large cottage built in 1928 for Alice Townsend, the wife of the owner of the Little River Lumber Company and the Little River Railroad; and
- the Chapman-Byers Cabin in “Society Hill,” given to Colonel David C. Chapman, an instrumental figure in the creation of Great Smoky Mountains NP, sometime in the mid-to-late 1930s in recognition of his service to the park.

As of early 2014, the NPS had completed the restoration and rehabilitation of the Appalachian Clubhouse and the Spence Cabin. Thirty contributing buildings in the Elkmont Historic District will be removed: the 1920 Wonderland Hotel Annex, twenty-six cabins, and three garages. The 2009 MOA stipulates the preparation of Historic Structure Reports (HSRs) for all historic properties to be retained. HSRs were completed in 2009 for the Appalachian Clubhouse, the Spence Cabin, and the Chapman-Byers Cabin (#38); in 2010 for the Addick Cabin (#5), “Adam-less Eden” (#5A), the Mayo Cabin (#7), the Levi Trentham Cabin (#7A), and the Mayo Servants’ Quarters (#7B); and in 2014 for the Smith (#2), Creekmore (#6), and Cain (#8) cabins. The MOA also states that the Tennessee State Historic Preservation Office (TNSHPO) shall review and evaluate a new National Register nomination for the Elkmont area to determine whether a historic district remains as a result of its implementation. The TNSHPO has not approved a draft National Register nomination begun in 2010 for the Daisy Town Community Historic District. It is recommended that, at a minimum, the National Register documentation for the Elkmont Historic District be updated to reflect the current conditions.⁴³²

Individual Properties

John Ownby Cabin (Sevier County, TN). The John Ownby Cabin (NRIS #7600167), the sole surviving resource from the settlement period of the Forks of the River settlement in the valley of the West Prong of the Little Pigeon River, was listed in the National Register on January 1, 1976. The

cabin continues to exhibit a high degree of integrity, with its broad, hand-hewn planks and half-dovetail notching.

⁴³¹ Thomason and Associates, *National Register Nomination: Elkmont Historic District*, 1994 (see Appendix A); National Park Service, *Elkmont Historic District: Final Environmental Impact Statement*, v–xviii; National Park Service, “Memorandum of Agreement”; National Park Service, “Record of Decision”.

⁴³² National Park Service, “Record of Decision”; National Park Service, “Memorandum of Agreement”.

The existing nomination should be amended to include the significance of this resource under Criterion A within the early park preservation context. The building was identified in early park documents relating to the preservation program, although rehabilitation plans were not implemented until the 1960s and 1970s.

Little Greenbrier School/Church (Sevier County, TN). National Register documentation for the Little Greenbrier School (NRIS #76000168) was accepted on January 11, 1976. The existing nomination should be amended to include the significance of this resource under Criterion A within the early park preservation context. NPS planners recommended that the school be preserved in early park documents, although rehabilitation plans were not implemented until the 1960s and 1970s.

Smoky Mountains Hiking Club Buildings (John Messer Barn) (Sevier County, TN). The John Messer Barn (a.k.a., Messer Barn, Smoky Mountains Hiking Club Barn) was listed in the National Register on January 1, 1976 (NRIS #76000166), for its significance under Criterion A and C as the last surviving resource associated with the Greenbrier community and as an example of the cantilever barn type. The barn was built about 1850–1870 south of Greenbrier Cove on Porter’s Creek, a tributary of the Middle Prong of the Little Pigeon River.

The Smoky Mountains Hiking Club Cabin, built 1934–1936, was determined eligible by the Keeper in 1988 for its associations with the Smoky Mountains Hiking Club, a significant Tennessee recreational and conservation group (see Appendix A). A Springhouse, also built 1934–1936, is located adjacent to the cabin. The entire site, including the John Messer Barn, Smoky Mountains Hiking Club Cabin, Springhouse, and landscape features should be evaluated as a cultural landscape significant for its associations with the hiking club. A new National Register historic district nomination should be prepared that incorporates the results of the cultural landscape study or studies.

King-Walker Place (Walker Sisters’ Place) (Sevier County, TN). National Register documentation for the King-Walker Place (NRIS #76000169) was accepted on March 16, 1976. Listed resources consist of the House, Springhouse, and Corn Crib. Additional documentation should be prepared to add the 6- to 10-foot-deep stone-lined cistern on the property as a contributing structure. The cistern was an important functional water-storage feature of the farmstead and retains sufficient integrity for listing.

The National Register nomination for the Walker Sisters’ Place should also be amended to include the early park preservation context for these resources. The site was recommended for preservation in early park documents, although rehabilitation plans were not implemented until the 1960s and 1970s. The lifetime lease in place at the Walker place played a key role in delaying any NPS development on the site, while at the same time contributing to its function as a living history museum in keeping with park plans for interpreting the area’s mountain culture.

Mayna Treanor Avent Cabin (Sevier County, TN). The Mayna Treanor Avent Cabin (NRIS #93001575) near Elkmont was listed in the National Register in 1994 under Criterion B for its associations with the noted regional artist Mayna Treanor Avent (1868–1959), who utilized the cabin as a summer studio retreat from 1919 to 1940, and under Criterion C as a rare surviving mid-nineteenth-century log cabin. The property retains integrity, and no amendments are recommended for this registration form.

Clingmans Dome Observation Tower (Sevier County, TN/Swain County, NC). The Clingmans Dome Observation Tower was listed in the National Register on August 15, 2012, under Criterion A

for its association with the Mission 66 program and under Criterion C as an example of mid-century modern (Park Service Modern) architecture. Its period of significance extends from its construction in 1959 to the completion of the Mission 66 program in 1966. The tower is one of only nine built during the Mission 66 program and is, therefore, an example of a comparatively rare Mission 66 resource type.⁴³³ No amendments are recommended for this registration form.

Smokemont (Oconaluftee) Baptist Church (Swain County, NC). Smokemont Baptist Church (NRIS #76000163) was listed individually in the National Register on January 1, 1976. It is significant under Criterion A for its association with the settlement of the Oconaluftee (later Smokemont) community and under Criterion C as an example of vernacular church architecture in the area. The church maintains a substantial degree of integrity and should remain on the National Register with no modifications to its existing documentation.

J. H. Kress (Hall) Cabin (Swain County, NC). The J. H. Kress Cabin (NRIS #76000162) was listed individually in the National Register on January 30, 1976, with significance under Criterion C in the area of architecture. Businessman J. H. Kress purchased the Hall family's cabin in 1940 and partially remodeled it as part of a larger hunting lodge facility that Kress created. When the NPS purchased the property, it demolished the Kress-built portion and restored the former Hall cabin to approximate its original appearance; the cabin exhibits a high level of craftsmanship in hewn-log construction. The building conveys little of its association with Kress and the recreational use of the area in the twentieth century before the establishment of Great Smoky Mountains NP and is, therefore, not eligible for listing under the recreation and tourism context. No additional National Register documentation is recommended. The cabin retains its integrity and should remain on the National Register with no amendments.

RESOURCES DETERMINED ELIGIBLE OR RECOMMENDED ELIGIBLE FOR LISTING IN THE NATIONAL REGISTER

Historic Districts

NPS Roads and Overlooks. The NPS approach to naturalistic park design is pervasively evident in the Great Smoky Mountains NP roads planned, surveyed, and completed in whole or in large part before 1942. NPS designers carefully developed the park pursuant to a comprehensive master plan, and these roads were crucial in shaping the visitor's aesthetic experience of the park's natural scenery. The three major park roads entirely or substantially developed before 1942—Newfound Gap Road, Clingmans Dome Road, and Little River/Laurel Creek Road (including the Townsend Entrance Road and the Elkmont Spur)—exhibit all facets of the 1930s NPS design philosophy. They unobtrusively follow the topography of river valleys and ridge sides; provide access to trailheads, scenic overlooks, campgrounds, and administrative and visitor contact areas; and offer striking vistas of mountains and river valleys to the traveling motorist. The NPS artfully restored road banks to a naturalistic appearance using native species moved from deeper within the forest or propagated at a CCC-run nursery at Ravensford. The consistent use of stone and stone-faced road structures—bridges, culverts, retaining walls, guardrail, and tunnel portals—aesthetically unifies the entire early road system.

These three roads form the core circulation system for one of the first major national parks east of the Mississippi. Most importantly, the roads define the park experience for the great majority of

⁴³³ Walton, Clingmans Dome Observation Tower.

visitors who do not venture into the back country but rather enjoy the scenes visible through the windshield and from pull-offs and overlooks.

It is recommended that National Register nominations be prepared for the Newfound Gap Road, Clingmans Dome Road, and Little River/Laurel Creek Cove Road. These resources are eligible for National Register listing under Criterion C because they embody the distinctive design philosophy and qualities of craftsmanship perfected by the NPS in the New Deal period. They are also eligible under Criterion A as important visitor facilities constructed pursuant to the park's master plan and because they represent the efforts of conservationists, state officials, Congress, and the Roosevelt Administration to revive the economy through public works while also conserving natural resources and providing recreational opportunities to the American people. The roads should each be nominated as an historic district that includes associated historic-period overlooks and comfort stations; major structures (bridges and tunnels); and small-scale features (culverts, curbing, guardrail and retaining walls, tree wells, and pull-offs) that provide evidence of the stone design aesthetic. Historic contributing landscape elements identified through CLIs and CLRs would also be included in the National Register documentation. The Tennessee and North Carolina State Historic Preservation Offices concurred in 1999 with a draft nomination prepared for a National Register historic district (based on the draft version of this HRS) that addressed park development from park creation in 1926 through 1942 and included these roads as contributing resources.

Discussions of important contributing components and integrity for the individual roads follow.

Newfound Gap Road (Sevier County, TN/Swain County, NC). A nomination for Newfound Gap Road would include the **Newfound Gap Comfort Station, Rockefeller Memorial, and Newfound Gap Parking Plaza.**

Newfound Gap Road exhibits all aspects of integrity through most of its 31-mile length. The 10-mile segment directly south of Newfound Gap, completed between 1961 and 1965, is visually consistent with the earlier road segments with stone facing on the road structures. The feeling, association, and setting of the newer road segment are compatible with the original road and do not detract significantly from the integrity of the original road. The vistas and opportunities to park in pull-offs provide essentially the same aesthetic experience envisioned by the first group of park planners in the 1930s. Because it exemplifies the pre-1942 NPS design approach, the newer road section does not preclude the road's eligibility for listing under Criterion C. Later alterations to Newfound Gap Road that have not diminished its integrity include several rebuilt stone guard walls, replacement steel-backed timber guardrail, lowered sections through tunnels on the Tennessee side, and a rebuilt section in North Carolina that had collapsed after a fill section failed following heavy rains.

The Newfound Gap Overlook was an important focal point within the park, a place where the majority of travelers on Newfound Gap Road were expected to stop. The entire overlook—including the Rockefeller Memorial, Comfort Station, and Parking Plaza—retains important associations with the initial park development context and, thus, contributes to the road's significance under Criterion A. However, only the Rockefeller Memorial and the nearby comfort station retain sufficient integrity to contribute to the road's significance under Criterion C as a CCC-era design. When the Newfound Gap Parking Plaza was enlarged in the 1960s, the distinctive elements of the original design, with its traffic islands and other features, were lost. Although some of the stonework on the downslope side of the parking area (including the massive buttressed stone retaining wall) appears to be original to the 1930s, the stone walls that were added in the 1960s do not follow the design aesthetic of 1930s NPS stonework. The new stonework is not primarily horizontal in emphasis, stones of widely different sizes are placed side by side, and the mortar joints are not recessed. Coupled with the raw blasting scar left after the expansion, the other changes are such that the original design, materials,

and workmanship are lost. A landscape study is recommended, however, to identify any historic features of the parking plaza that may remain from the park development era.

The Newfound Gap Comfort Station possesses all aspects of integrity. It is on its original site and maintains its original setting. Visible alterations to the building include the substitution of aluminum windows and doors for the original wood features, the replacement of wood shingles with asphalt roofing, and the addition of several bubble skylights to the roof. These changes do not detract significantly from the rugged strength of the original design conveyed by the stone masonry, low massing, and siting of the building partially within the hillside.

The Rockefeller Memorial is significant under National Register Criteria A and C as an outstanding example of NPS naturalistic design in a major eastern national park; as the work of Henry Hubbard, a leading American landscape architect; and because it represents the movement that led to the creation of Great Smoky Mountains NP. The memorial fully exemplifies the NPS philosophy mandating development that blended with natural surroundings. The use of locally quarried rock-faced stone and the curving contours and batter of the walls help marry the manmade structure to the rounded, forested peaks of the Smokies. Additionally, the memorial commemorates the roles of the two states, the federal government, and private philanthropy in establishing the park. The memorial is emblematic of New Deal efforts to conserve natural resources, provide recreation, and put American youth back to work through the CCC and other programs. The memorial takes on added significance as the site of President Franklin Roosevelt's 1940 dedication of the park.

The Rockefeller Memorial retains all aspects of integrity. Because of the durability of the materials and construction methods, integrity of location, design, materials, and workmanship is strongly present. The working and careful laying of the stone to create an informal, unstudied appearance are an especially important, and unchanged, aspect of the memorial. Although the 1960s reconfiguration of the Newfound Gap parking area has slightly compromised integrity of setting, the memorial still provides the same views into surrounding valleys that it did when it was completed in 1939. Integrity of feeling and association are convincingly evident; the quiet strength of the massive structure conveys the NPS design principles of the period, and the simply worded tablet invokes the unique circumstances that created the park.

The Rockefeller Memorial fully satisfies the requirements of Criteria Consideration F applying to commemorative structures because it is eligible for its outstanding design qualities under Criterion C. In addition, the memorial was erected during the period of initial park development partially with CCC labor and thus has important associations with the social and economic forces that led to the park's creation.

Clingmans Dome Road (Swain County, NC). A nomination for Clingmans Dome Road would include the **Forney Ridge Overlook, Parking Area, and Comfort Station.**

Clingmans Dome Road has strong integrity throughout its length. The alignment of this road is unchanged except for a 0.2-mile portion later incorporated into Newfound Gap Road, its road structures are in generally good repair, and it provides essentially the same aesthetic experience that it did when it opened in the 1930s. The road strongly conveys the NPS design philosophy and the craft skills of the masons who built its structures.

The Forney Ridge Overlook and comfort station are eligible for listing under National Register Criteria A and C. The overlook is a significant element of the park's original plan of visitor facilities

and exemplifies the NPS naturalistic design precepts of the 1930s.

The Forney Ridge Parking Area is carefully sited to follow the curving contour of the mountainside and provide views to the south. Retaining walls, curbing, and steps of local stone are used throughout. The parking lot itself is now paved, and three vault toilets were added to the central island ca. 2010. However, the toilet facilities are relatively unobtrusive, small in size with low profiles and exteriors that blend into the natural surroundings. The stone walls, curbing, and steps and the original configuration of the islands are all intact.

Aesthetic values are served by the location of the former Forney Ridge Comfort Station, converted to a seasonal visitor center, several hundred feet up the mountainside, out of sight of the parking area. Changes to the building and its surroundings lessen its integrity but do not defeat its eligibility. The ca. 2010 rehabilitation of the building removed earlier incompatible alterations (such as bubble skylights) and restored some of its original features, including wood doors and nine-light windows.

Little River/Laurel Creek Road (Sevier County/Blount County, TN), Townsend Entrance Road (Blount County, TN), and Elkmont Spur (Sevier County, TN). The Little River/Laurel Creek Road was designed and laid out during the initial period of park development prior to 1942, but the final section of this road from Three Forks to Cades Cove was not completed until the early 1950s. However, the completed road fully represents the 1930s NPS design principles of landscape harmonization. The road exhibits all aspects of integrity.

NPS Administrative/Visitor Contact Areas. Documentation should be prepared to list the Sugarlands Headquarters and Oconaluftee Administration Building areas in the National Register as historic districts. The Tennessee and North Carolina State Historic Preservation Offices concurred in 1999 with a draft nomination prepared for a National Register historic district (based on the draft version of this HRS) that addressed park development from park creation in 1926 through 1942 and included these as contributing resources.

Sugarlands Headquarters Area (Sevier County, TN). The headquarters area at Sugarlands is eligible for listing under National Register Criteria A and C. Under Criterion A, the headquarters area is associated with the two significant periods of development at Great Smoky Mountains NP: the initial years facilitated by New Deal public works programs such as the CCC and the PWA, and the later work funded by the system-wide Mission 66 program. The two primary buildings within the area, the 1938–1940 headquarters building and the 1958–1960 visitor center, successfully convey the evolution of NPS planning and development over the course of two decades.

The headquarters building, headquarters garage, grounds, and two bridges over Fighting Creek are also significant under Criterion C as a remarkably successful example of 1930s NPS planning and landscape harmonization. The headquarters building was prominently and artfully sited so as to be visible to motorists traveling north through the park. The formality of the proposed U-shaped court behind the building was appropriate for this important symbol of NPS authority. Great care was taken with grading and plantings surrounding the building. Minor alterations to the headquarters building include an exposed steel fire escape at the rear and the paving over of the flagstone walks surrounding the building. The garage building conforms to the headquarters structure in materials and design and is an important part of the composition. The 1991 additions to the garage are at the rear and do not intrude on the court scheme. The roads and bridges to the utility and residential areas are also important parts of the overall design for the headquarters developed area that retain all aspects of integrity. The construction of the Mission 66 visitor center required the elimination of the Y intersection of Newfound Gap Road and Little River/Laurel Creek Road, which compromised the axially and formality of the approach to the headquarters area from the south and diminishes the

overall integrity of setting. However, the architecturally compatible building does not defeat the eligibility of the earlier headquarters complex under Criterion C. The NPS consciously used natural materials in the design of the visitor center to connect it visually to the earlier buildings on the site and minimize the contrast between the traditional and modern architectural styles.

As a contributing resource within the headquarters area district, the Sugarlands Visitor Center also possesses significance under Criterion C as an example of Mission 66 visitor center architecture that retains integrity of location, design, materials, and workmanship. The comfort station constructed in 1988 and rear diagonal ell addition built in 1999 do not substantially alter the building's ability to convey its original design intent. The Park Service Modern architectural elements—including long low-pitched gable roofs, wide overhanging eaves, horizontal massing, and T-shape frame—remain prominent, and no significant alterations have been made to the original facade. Although large, both additions employ the same materials, massing, rooflines, and style as the original building and are, thus, compatible in design and intent. The parking area, circulation, and plaza around the building have been altered since their construction. A landscape study is recommended to identify those historic features that would contribute to the site's significance under the Mission 66 context.

Oconaluftee Administration Building Area (Swain County, NC). The Oconaluftee Administration Building area is eligible for listing under National Register Criteria A and C. It is a carefully designed and sited administrative building that fully exemplifies NPS naturalistic design principles. Furthermore, it represents the New Deal conservation, public recreation, and public works emphases. The administration building at Oconaluftee retains integrity of location, design, materials, workmanship, feeling, and association. The building's appearance is virtually unchanged from the time of its construction. The slate roof, added in the 1950s, was the roofing treatment originally specified. The parking area and stone curbing west of the building; the retaining wall to the east; and the stone terraces, steps, and drinking fountain to the north are all intact. Minor alterations to the landscape consist of the paving over of the flagstone walks surrounding the building and the addition of a second stone drinking fountain at the bottom of the stone steps in 1975.⁴³⁴

Integrity of setting is compromised by several factors. The 2010 construction of a visitor center and comfort station directly opposite the administration building, adjacent to an expanded 1950s parking lot, altered the historic view to the south across a large field. However, both new buildings were designed to be architecturally compatible with the administration building, having similar massing, roof profiles, and exterior materials. The landscape that connects the administration building to the new visitor center complex and the Oconaluftee Mountain Farm Museum further south is also compatible with the historic setting.

Campgrounds and Picnic Areas. The campgrounds at Cades Cove, Cosby, Deep Creek, Elkmont, Look Rock, and Smokemont and the picnic areas at Chimneys and Metcalf Bottoms are eligible for listing in the National Register as historic districts under Criteria A and C. The Tennessee and North Carolina State Historic Preservation Offices concurred in 1999 with a draft nomination prepared for a National Register historic district (based on the draft version of this HRS) that addressed park development from park creation in 1926 through 1942 and included the Chimneys and Smokemont areas as contributing resources. The Tennessee SHPO issued a Determination of Eligibility (DOE) for the Look Rock Campground/Picnic Area in 2012.

Under Criterion A, Chimneys and Smokemont are associated with the initial period of NPS development at Great Smoky Mountains NP and with two New Deal public works programs, the

⁴³⁴ Mitchell and Cote, Historic Structure Report: Oconaluftee Ranger Station/Visitor Center.

CCC and PWA. The PWA partially funded the two campgrounds' development, and CCC laborers built them. Both sites are also associated with the NPS Mission 66 program, which provided funding for the conversion of the Chimneys site to a picnic area in the late 1960s and the expansion of the Smokemont site between 1958 and 1959. Cades Cove, Cosby, Deep Creek, Elkmont, Look Rock, and Metcalf Bottoms represent substantial completed public use area developments included in the park's 1956 prospectus for Mission 66 (or subsequent planning documents prepared during the Mission 66 period) and intended to provide sufficient government-managed accommodations for the increased numbers of automobile tourists visiting the park. All were constructed between 1945 and 1972 and retain most, if not all, aspects of integrity.

The Chimneys and Smokemont campgrounds are significant under Criterion C as outstanding examples of 1930s NPS campground design executed as part of the park's master plan. Sited in river valleys for both practical and aesthetic reasons, the campgrounds incorporated elements of approved NPS design policy: one-way gravel-surfaced loop roads through the campgrounds, gravel-surfaced parking spurs for each campsite, stone fireplaces to control the location of fires, and sanitary facilities in the form of running water and comfort stations. The comfort stations themselves are excellent examples of NPS rustic architecture, designed to harmonize with the natural environment through their low massing and use of local stone. In keeping with the NPS policy of naturalistic design, plantings at the two campgrounds emphasized local varieties of trees and shrubs.

The Mission 66 campgrounds and picnic areas at Great Smoky Mountains NP (Cades Cove, Cosby, Deep Creek, Elkmont, Look Rock, Metcalf Bottoms, and a portion of Smokemont) are significant under Criterion C as characteristic examples of Mission 66 public use area design that adhere to the modern design philosophy prevalent in the 1945 to 1972 period. The campgrounds feature one-way loop roads, larger parking spurs to accommodate recreational vehicles, campsites arranged on alternating sides of the road, improved water and electrical lines, and standardized comfort stations. The picnic areas are sited at scenic overlooks or along creeks to take advantage of natural resources and incorporate wide loop roads and parking spurs, shade structures, fire pits, and comfort stations. All of the sites retain their original spatial organization and comfort stations. Their layouts represent Mission 66 goals of managing growth and modernist design principles.

Look Rock Campground/Picnic Area (Blount County, TN). The Look Rock Campground/Picnic Area is the only public use area constructed along the partially completed Foothills Parkway and features one of the three mid-century modern (Park Service Modern) observation towers built under the Mission 66 program. The Look Rock Observation Tower is a distinctive reinforced concrete structure similar to the tower at Clingmans Dome. The adjacent campground and picnic area remain an intact example of a Mission 66 public use area, designed to alleviate some of the visitor congestion within the park. The circulation system, surrounding landscape, and the spatial arrangement of the camp and picnic sites are unchanged. The four comfort stations (three within the campground and one within the picnic area) remain on their original sites and are largely unaltered. The small, rectangular buildings feature standard Mission 66 design elements, including moderately pitched gable roofs, deep roof overhangs, extended gable eaves, bands of horizontal windows placed just under the roofline, exterior privacy walls, and decorative concrete block construction. The kiosk and ranger station at the entrance to the campground also remains on its original site and retains much of its original materials, design, and workmanship. The small amphitheater retains its original layout with projection screen and booth, semi-circular rows of benches, and fire pit. The screen and booth are both in poor condition, with rotting boards and a caved-in roof on the booth, but the amphitheater site retains integrity of location, setting, feeling, and association. As a nondescript

utilitarian building, the 1959 pump house located near the amphitheater is listed as a non-contributing resource in the 2012 DOE for the Look Rock Campground/Picnic Area historic district.

Cades Cove Campground/Picnic Area (Blount County, TN). The Cades Cove Campground/Picnic Area, sited near the entrance to the Cades Cove Loop Road that takes visitors through one of the park's most popular tourist attractions, retains integrity as a Mission 66-era public use area designed to provide overnight accommodations within the park. The circulation system, surrounding landscape, and the spatial arrangement of the camp and picnic sites are unchanged. The campground store and shelter remains a dominant feature of the area, with its large massing, tiered roofs, deep overhanging eaves, and pointed-arch vergeboards. The massive A-frame covered amphitheater attached to the north end of the store and supported by large stone and steel piers is the only remaining resource of this type within the park, as a similar building constructed at Smokemont Campground is no longer extant. Its design, materials, and workmanship are intact, including the pointed-arch vaulted ceiling and a large stone wall supporting a projection screen at the north end. The eight comfort stations (six within the campground and two within the picnic area) remain on their original sites and continue to convey much of their original design, materials, and workmanship. The small, low-rise buildings represent a standard form of Mission 66-era comfort station design, clad in split stone to resemble other park buildings with moderately pitched, side-gabled roofs and horizontal windows placed just under the roofline. The four comfort stations built in 1957–1958 have exterior stone privacy walls, deeper roof overhangs, extended eaves at the gable ends, and longer bands of windows.

The 1958 campground store bike building should be considered a non-contributing resource within the Cades Cove Campground/Picnic Area historic district as a result of substantial additions constructed in 2009–2010. The building no longer conveys its original design, but the additions do not detract from the overall integrity of the district.⁴³⁵ In addition, the 1993 covered picnic shelter in the picnic area should be considered a non-contributing resource within the historic district because it was built after the period of significance for Mission 66 development at Great Smoky Mountains NP and does not reflect Mission 66 plans or designs.

Metcalf Bottoms Picnic Area (Sevier County, TN). The Metcalf Bottoms Picnic Area, located at a scenic spot on the Little River just off the Little River Road, is an intact example of a Mission 66 picnic area that clearly illustrates the program's focus on providing accommodations for large numbers of day-use visitors. The circulation system, surrounding landscape, and the spatial arrangement of the picnic sites are unchanged. The five comfort stations remain on their original sites and are largely unaltered. The small, rectangular buildings conform to the standard Mission 66 comfort station design, with moderately pitched gable roofs, deep roof overhangs, extended eaves at the gable ends, bands of horizontal windows placed just under the roofline, and exterior privacy walls. The walls of the concrete masonry unit buildings feature blocks arranged in distinctive geometric patterns that convey a modern aesthetic consistent with Mission 66 design principles. The 1976 pump house (a utility building) and 1986 picnic pavilion at Metcalf Bottoms should be considered non-contributing resources within the Metcalf Bottoms Picnic Area historic district because they were built after the period of significance for Mission 66 development at Great Smoky Mountains NP and do not reflect Mission 66 plans or designs. However, neither resource detracts from the overall integrity of the district.

Elkmont Campground (Sevier County, TN). The Elkmont Campground, located along the Little River near the former resort communities at Elkmont (see the discussion of the Elkmont Historic District above), retains integrity as a cohesive Mission 66 development. The circulation system, surrounding landscape, and the spatial arrangement of the campsites are unchanged. The twelve

⁴³⁵ Cades Cove Campground Store Concession Facilities Improvements: Environmental Assessment (Gatlinburg, TN: National Park Service, July 2009).

comfort stations remain on their original sites and are largely unaltered. The small, rectangular buildings conform to the standard Mission 66 comfort station design, with moderately pitched gable roofs, deep roof overhangs, extended eaves at the gable ends, bands of horizontal windows placed just under the roofline, and exterior privacy walls. Like the comfort stations at Metcalf Bottoms and Deep Creek, the walls of the concrete masonry unit buildings at Elkmont feature blocks arranged in distinctive geometric patterns that convey a modern aesthetic consistent with Mission 66 design principles. The outdoor amphitheater represents a typical Mission 66 design and retains its projection booth and projection screen enclosure. The two-unit seasonal quarters located within the campground is a well-preserved example of Mission 66 housing with no substantial exterior alterations. The 1975 kiosk and 1980 woodshed at the campground entrance should be considered non-contributing resources within the Elkmont Campground historic district because they were built after the period of significance for Mission 66 development at Great Smoky Mountains NP. Neither resource detracts from the overall integrity of the district.

The 1960 ranger station (camptender residence) and a second two-unit seasonal quarters built in 1966 at Elkmont are located outside the campground, along the access road, and should not be included in the Elkmont Campground historic district. Both buildings are typical examples of Mission 66 employee housing, built inexpensively according to standardized plans that have little architectural distinction, with minor alterations since their construction.

Chimneys Campground/Picnic Area (Sevier County, TN). The Chimneys Picnic Area (previously Campground) located along the Little Pigeon River adjacent to Newfound Gap Road conveys its significance as one of the earliest development areas within the park and an example of early NPS landscape design. Changes to the Chimneys site since its initial development in 1937–1939 are minor and include paving of the roads; accessibility modifications to the walkways at the lower comfort station; replacement of the original stone fireplaces with metal grills; and the removal of the campfire circle, although stones remaining on the ground indicate its location. The circulation system, surrounding landscape, and the organization into individual camp (now picnic) sites are unchanged. The three comfort stations are on their original sites and continue to convey much of their original design, materials, and workmanship. New windows and skylights and a different roofing material diminish the integrity of these buildings but do not severely compromise the strengths of their original rustic design. Four original drinking fountains of rustic stone masonry remain. Plant materials appear to be very similar to those specified in a 1934 planting plan (Drawing NP-GRSM 1050B), with a few volunteers, notably black cherry trees. The conversion of the site to a picnic area to reduce the impact of visitor activities in the park represents a typical Mission 66 project. The addition of a vault toilet to the picnic area in 2010 does not detract from the district's overall integrity. In sum, the Chimneys picnic area is remarkably successful in conveying its original design intent and retains sufficient integrity for listing in the National Register.

Cosby Campground (Cocke County, TN). The Cosby Campground at the northeastern edge of the park retains integrity as a Mission 66-era public use area. The circulation system, surrounding landscape, and the spatial arrangement of the camp and picnic sites are unchanged. The eight comfort stations remain on their original sites and continue to convey much of their original design, materials, and workmanship. The small, low-rise buildings represent a standard form of Mission 66-era comfort station design, clad in split stone to resemble other park buildings with moderately pitched, side-gabled roofs, deep overhangs and extended eaves at the gable ends, exterior stone privacy walls, and bands of horizontal windows placed just under the roofline. The outdoor amphitheater represents a typical Mission 66 design and retains its projection booth with shelter and projection screen enclosure. The camptender residence located within the campground is a well-preserved example of Mission 66 housing with few exterior alterations. The 1975 kiosk at the campground entrance and the 1992 water system pump house near the amphitheater should be

considered non-contributing resources within the Cosby Campground historic district because they were built after the period of significance for Mission 66 development at Great Smoky Mountains NP and do not reflect Mission 66 plans or designs. Neither resource detracts from the overall integrity of the district.

Smokemont Campground (Swain County, NC). The Smokemont Campground along the Bradley Fork of the Oconaluftee River adjacent to Newfound Gap Road conveys its significance as an initial component of park development that incorporates Mission 66 additions. The original portion of the campground (the portion east of the Bradley Fork) exemplifies 1930s NPS campground design, while the layout of the portion on the west side of the Bradley Fork reflects Mission 66 design principles.

The original circulation system and placement of individual campsites in the 1930s area are intact except a minor 1950s road reconfiguration in a small portion of Section A encompassing seven campsites. The three CCC-constructed comfort stations are on their original sites and have been minimally altered. Plantings in the campsites appear consistent with a 1934 planting plan (Drawing NP-GRSM 1014B). Nine original drinking fountains of rustic stone masonry remain. Mission 66 additions to the 1930s area consist of a wood-frame ranger station/camp tender residence at the entrance and two rustic stone-clad comfort stations in Section D. These resources employed standard Mission 66 building designs and have seen relatively few alterations. They do not detract from the overall integrity of the earlier campground design, which remains strongly conveyed. A combined camp store/shelter added in Section D in 1958 (similar to the extant building at Cades Cove Campground) has since been removed.

The expansion of the campground under Mission 66 across Bradley Fork occurred in an area designated for expansion in the 1930s master plans. The 43 campsites for recreational vehicles in this section are arranged in a characteristic Mission 66 fashion on alternating sides of a one-way loop road around a central comfort station. The camp tender residence (a.k.a., Oconaluftee Ranger Station) at the campground entrance and the covered shelter and other standing structures at the outdoor amphitheater adjacent to the campground entrance also exhibit standard Mission 66 design principles. The substantially altered 1975 kiosk at the campground entrance should be considered a non-contributing resource within the Smokemont Campground historic district because it was built after the period of significance for Mission 66 development at Great Smoky Mountains NP and does not reflect Mission 66 plans or designs. The original design intent for the Smokemont campground is strongly conveyed.

Deep Creek Campground/Picnic Area (Swain County, NC). The Deep Creek Campground/Picnic Area along the southern edge of the park is another well-preserved example of Mission 66 development within the park. The circulation system, surrounding landscape, and the spatial arrangement of the camp and picnic sites are unchanged. The picnic pavilion, one of the first structures built within the area and the only extant example of this resource type built during the Mission 66 period within the park, employs a characteristic NPS form, with its large gabled roof supported by large stone and steel piers, deep overhanging eaves, and integral stone chimney. The five comfort stations in the campground remain on their original sites and are largely unaltered. The small, rectangular buildings conform to the standard Mission 66 comfort station design, with moderately pitched gable roofs, deep roof overhangs, extended eaves at the gable ends, bands of horizontal windows placed just under the roofline, and exterior privacy walls. Like the comfort stations at Metcalf Bottoms and Elkmont, the walls of the concrete masonry unit buildings at Deep Creek feature blocks arranged in distinctive geometric patterns that convey a modern aesthetic consistent with Mission 66 design principles. The picnic area comfort station, originally constructed in 1954 but substantially rebuilt in 2010, should be considered a non-contributing resource within

the Deep Creek Campground/Picnic Area historic district for its lack of integrity. The 1975 kiosk at the campground entrance should also be considered a non-contributing resource because it was built after the period of significance for Mission 66 development at Great Smoky Mountains NP and does not reflect Mission 66 plans or designs. The district as a whole, however, continues to convey its original design intent and retains integrity as a Mission 66-era public use area.

The National Register boundary for the Deep Creek Campground/Picnic Area historic district should be drawn to exclude the two residences (a ranger station and a seasonal bunkhouse) constructed at Deep Creek in 1961 in an area immediately adjacent to the campground. Both buildings are typical examples of Mission 66 employee housing, built inexpensively according to standardized plans that have no architectural distinction, with minor alterations since their construction and in need of substantial rehabilitation. A third seasonal residence built in this area is no longer extant.

Voorheis Estate (Sevier County, TN). A draft National Register district nomination for the Voorheis Estate was prepared in 2002, and the TNSHPO determined the property eligible for listing. The information in this HRS and the CLI completed for the Voorheis Estate in 2010 should be used to prepare an updated district nomination. The buildings, structures, and surviving landscape features of the Voorheis Estate are significant at the state level under Criteria A and C as the only surviving private estate associated with recreation and tourism within the park boundary and as rare examples of resort architecture with a strong rustic flavor in the state of Tennessee. The estate represents the period just before the creation of the park, when improved roads made it possible for wealthy vacationers and retirees to contemplate building resort homes in the mountains. The property is also significant at the state level under Criterion B for its associations with the philanthropist Louis E. Voorheis (1875–1944) and his efforts to improve living conditions in Southern Appalachia through the revival of traditional crafts such as woodworking and textile production. The period of significance for the district is 1928–1952, when the property was under Voorheis ownership and management. Contributing resources are the Lodge, Horse Barn, Apple Barn, Guest House, Caretaker’s House, and numerous designed landscape features. Noncontributing resources are the concrete block pump house, greenhouses, NPS experimental equipment surrounded by a chain-link fence, and two bridges over the branches of Le Conte Creek.⁴³⁶

Overall, the Voorheis Estate possesses substantial integrity of location, design, materials, workmanship, setting, feeling, and association. Although two residential buildings have been removed, the majority of the estate buildings survive, as does the circulation system and a number of designed landscape features such as the stone wall along the entry drive and remnants of the water garden. The two pre-existing buildings that Voorheis had remodeled were given exterior treatments that conform to the newly constructed buildings. The Guest House, in particular, has the same shingle siding as the lodge and barn. Integrity of design, materials, and workmanship is particularly strong; naturalistic materials like fieldstone, cedar shingles, and hewn logs are everywhere in evidence and strongly convey the rustic appearance that Voorheis consciously sought. The conversion of the estate to NPS quarters and research facilities in the late 1970s somewhat compromised the integrity of feeling and association but not enough to defeat eligibility. The Twin Creeks Science and Education Center (2007), comfort station (2010), and picnic shelter (1988)—all located adjacent to but outside the boundary of the original Voorheis property—have negligible effect on the estate’s integrity.

⁴³⁶ Robert W. Blythe, Draft National Register Nomination: Voorheis Estate, 2002; National Park Service, Cultural Landscapes Inventory: Voorheis Estate (Twin Creeks) (Atlanta, GA: Southeast Regional Office, 1998), 8.

Cataloochee (Haywood County, NC). None of the farmsteads and structures of the Cataloochee watershed have been documented for National Register purposes. In 1996–1997, the Southeast Support Office prepared a Level I CLI for Cataloochee, and the Great Smoky Mountains NP staff prepared a draft CLR for Cataloochee in 2000. In 2012, the NPS submitted a DOE for the Little Cataloochee Baptist Church and related Little Cataloochee Cemetery Headstones (a.k.a., Ola Missionary Baptist Church), finding them eligible for the National Register under Criterion A for their association with the development of the Cataloochee community. The North Carolina State Historic Preservation Office (NCSHPO) has requested additional information prior to offering its opinion of eligibility.⁴³⁷

New National Register documentation should be prepared that nominates resources in the Cataloochee area as an historic district eligible for listing under Criteria A and C within the settlement/agricultural community, architectural, and recreation and tourism contexts.

The following resources are eligible for listing in the National Register under Criteria A and C because of their association with the settlement and agricultural occupation of Cataloochee and as exemplars of their respective building types and styles of vernacular architecture that possess enough integrity for National Register listing:

- Jim Hannah Cabin;
- Hub Caldwell House;
- Jarvis Palmer House;
- Jarvis Palmer Blacksmith Shop;
- Jarvis Palmer Springhouse;
- Jarvis Palmer Barn;
- Hiram Caldwell House;
- Hiram Caldwell Barn;
- Steve Woody House;
- Steve Woody Springhouse;
- Hall Springhouse;
- Indian Creek School (Beech Grove School);
- Palmer Chapel (Big Cataloochee Methodist Church);
- Little Cataloochee Baptist Church;
- Pratt Truss Bridge, Lower Cataloochee Creek;
- Warren Truss Bridge, Upper Cataloochee Creek.

The Cataloochee Turnpike, Old Cataloochee Road (a.k.a., Cataloochee Valley Road, a disused road trace), and Cataloochee Road (a.k.a., Cataloochee Valley Road) all would contribute to the significance of a Cataloochee historic district under Criterion A for their association with the development of the Cataloochee community. The portions of Cataloochee Road that were realigned in the 1930s and then further improved in 1964–1971 do not contribute to the significance of the historic district. The Cataloochee Turnpike and Cataloochee Road require further evaluation of their significance under Criterion C. The CCC improved both roads during the 1930s and 1940s, and there is no complete inventory of their culverts and other associated features that would allow for an

⁴³⁷ Ramona M. Bartos, NCSHPO, to Dale Ditmanson, Great Smoky Mountains NP, October 8, 2012, on file at Great Smoky Mountains NP, Gatlinburg, TN.

assessment of their significance under Criterion C in the area of engineering. Therefore, a CLI for each roadway is recommended to identify such associated resources. For the Cataloochee Turnpike outside the settled area of Cataloochee Valley, the CLI should also identify non-road-related structures and features such as cemeteries, fences or stone walls, and ruins that may be adjacent to the roadway corridor. Because the Cataloochee Turnpike extends for a substantial distance outside the heart of the settled Cataloochee area (about 8 miles), the road may qualify for listing in the National Register as a separate historic district if it retains a sufficient density of such resources from the historic period. The Old Cataloochee Road lacks sufficient noteworthy engineered features to contribute to the potential district's significance under Criterion C, but is an important landscape feature for other settlement-period resources in the area.

The Will Messer Barn was dismantled and moved from its original location in Little Cataloochee to its present location in 1978, where it was reassembled.⁴³⁸ It is, therefore, not eligible for listing under Criterion A. However, the barn does qualify for listing under Criteria Consideration B: Moved Properties, as it is significant under Criterion C in the area of architecture as an example of the timber crib barn type and retains the integrity of design, materials, and workmanship necessary to convey this significance. The nomination should include data concerning the methods employed during the NPS movement of the barn and a discussion of integrity sufficient to justify its qualification for National Register listing under Criteria Consideration B.

The Palmer Tourist Cabin within the Cataloochee area contributes to the district for its local significance under Criterion A as the sole surviving building in the park representing the efforts of local mountain residents to cater to the increased number of recreational visitors in the 1920s. More widespread automobile ownership and improved roads changed forever the recreational habits of most Americans in the twentieth century. As tourists were able to reach previously inaccessible natural areas, enterprising residents like Jarvis Palmer sought to profit from the visitors by erecting facilities for them and catering to their needs. The Palmer Tourist Cabin, the only remaining of three similar cabins built specifically for visiting fishermen, represents early twentieth-century tourism in the mountains. Constructed ca. 1917 of rough-sawn lumber with a metal roof, the building served as a tourist bunkhouse until the 1930s and provided seasonal housing for park employees from 1978 to about 2009. The NPS substantially modified the interior and added a small restroom at the rear. Exterior alterations consist primarily of in-kind repairs. Although the building is in need of maintenance, it retains sufficient integrity to convey its associations with the recreation and tourism context.⁴³⁹

Although many of the buildings and structures in the Cataloochee area are used as historic interpretive exhibits, their restoration as such occurred much later than the other outdoor field museums within Great Smoky Mountains NP. Early park development plans envisioned Cataloochee as a prime candidate for an outdoor field museum based on its concentration of significant resources. Decisions made in the 1930s and 1940s regarding which historic buildings to remove from the area and early efforts made to improve access to the area reflected this intention. However, a lack of funding delayed most of the restoration and interpretation work until the 1970s, when the NPS as a whole, and the park in particular, established new post-Mission 66 planning and development priorities. Only the Jim Hannah Cabin was restored prior to 1959; the remainder of the buildings within the outdoor field museum at Cataloochee reflect later NPS restoration,

⁴³⁸ The Cataloochee Historic District CLR states the barn was "reconstructed," but neither the CLR nor the earlier HSR for the building provide data on whether the level of conservation rose to the definition of "reconstruction" that would require the building to meet Criteria Consideration E: Reconstructed Properties. Listing the building in the National Register may require that additional data be provided sufficient to meet this Criteria Consideration (Carroll and Pulley, Historic Structures Report, Little Cataloochee; Flaugh, Cataloochee Historic District, 44, 83).

⁴³⁹ The Cataloochee Historic District CLR recommends the preservation of the tourist cabin for interpretive purposes (Flaugh, Cataloochee Historic District, 187, 207).

rehabilitation, and reconstruction standards. Therefore, the Cataloochee district would not be eligible for listing under the early park preservation context.

The Hiram Caldwell Springhouse and Daniel Cook Cabin in Cataloochee are not eligible for the National Register. The springhouse was constructed in the 1980s to replace an earlier springhouse that was lost. The Cook Cabin reconstruction was completed in 1999. Neither resource is fifty years old or meets the requirement of Criteria Consideration E: Reconstructed Properties.

Oconaluftee Mountain Farm Museum (Swain County, NC). The Oconaluftee Mountain Farm Museum (originally named the Oconaluftee Pioneer Farmstead) is a re-creation of a typical Smoky Mountains agricultural complex intended to present a comprehensive overview of the material culture and daily life of mountain farms for purposes of education and interpretation. The outdoor field museum, which was established in the 1950s, preserves some notable settlement-period resources but derives its primary significance from the story it tells of the prevalent concepts of historic preservation in the 1930s and 1940s. The site was another feature, like mountain vistas, that the park's planners provided for the visitor's enjoyment and edification. All but one of the various hewn-log buildings at the museum were moved from other locations within the park or from outside the park. The Floyd/Enloe Barn, although original to the valley, was moved farther back from the road when the field museum was created. Additionally, the museum's resources have been re-arranged on the site at least once.

New registration documentation should be prepared to list the Oconaluftee Mountain Farm Museum in the National Register as an historic district with significance as an outdoor field museum under Criterion A under the early park preservation context and under Criterion C in the area of architecture due to the representative examples of various upland architectural types that it contains.

The following moved resources within the complex are considered eligible for listing in the National Register under Criterion A within the early park preservation context and may be eligible under Criterion C and Criteria Consideration B: Moved Properties as representative examples of their respective architectural types:

- Floyd/Enloe Barn;
- Joe Queen Corn Crib;
- Joe Queen House;
- Jim Beard Corn Crib and Gear Shed;
- Jenkins Chicken House;
- Conard Meat House;
- Caldwell Springhouse;
- Messer Apple House;
- Gregory Blacksmith Shop; and
- Jenkins Pig Pen.

A nomination should include data concerning the methods employed during the NPS movement of the resources and a discussion of integrity to justify their qualification for National Register listing as contributing resources under Criterion C and Criteria Consideration B.⁴⁴⁰ The moved resources are

⁴⁴⁰ As noted in Chapter Six, relocated resources within an outdoor field museum do not need to meet Criteria Consideration B: Moved Properties to be eligible under Criterion A for the early park preservation context. Criteria Consideration B need only be applied under the Criterion C architecture statement.

not eligible for National Register listing under Criterion A within the settlement and community development context, as they lack the requisite integrity.

The Jenkins Pig Pen is actively used for housing hogs and likely does not retain sufficient integrity to be eligible under Criterion C/Criteria Consideration B. However, as a component of the outdoor field museum with in-kind replacement of construction materials, the resource retains sufficient integrity to be eligible under Criterion A within the early park preservation context.

The following resources within the complex are re-creations of typical mountain buildings and structures but do not attempt to replicate specific examples:

- Outhouse;
- Woodshed; and
- Bee Gum Stand.

These re-creations have no significance within the settlement and community development or the vernacular architecture contexts. However, they are eligible for inclusion in the recommended historic district under Criterion A as components of the outdoor farm museum. All three were part of the NPS field museum proposal and were constructed by the NPS during the 1950s when the museum was established.

The Sorghum Furnace and Mill built at the Oconaluftee Mountain Farm Museum between 1988 and 1990 is less than fifty years old and was not an integral component of the initial field museum proposal. Therefore, it is not eligible for listing in the National Register under any of the criteria.

Individual Properties

Shuckstack Fire Tower (Swain County, NC), Mount Sterling Fire Tower (Haywood County, NC), and Cove Mountain Fire Tower (Sevier County, TN). The three extant steel fire towers within the park—Shuckstack, Mount Sterling, and Cove Mountain—are eligible for listing under National Register Criterion A for their associations with the CCC and New Deal conservation efforts at Great Smoky Mountains NP, in particular the fire control program in use at all national parks for the majority of the twentieth century. They are also eligible under Criterion C as representative examples of a common fire tower design. Each of the three nearly identical towers is a 60-ft-tall, open-frame, steel structure with a small square cab at the top. Individual nominations should be prepared to list each tower in the National Register.

The National Historic Lookout Register estimates that only 1/5 of the approximately 5,000 lookout towers constructed in the United States remain standing. Only seven fire towers and nineteen lookout towers have been listed in the National Register of Historic Places, sixteen of which are similar in form to the three that remain at Great Smoky Mountains NP.

The NPS repaired the fire towers in 1962, although many were decommissioned as early as the late 1960s. By the mid-1970s, the NPS discontinued use of all the fire towers in and around the park, and over the subsequent decades many were removed. Park documentation recorded the removal of the towers at Greenbrier Pinnacle, Rich Mountain, and High Rocks between 1982 and 1985 by crews from TVA Aviation Services. Each tower was felled and cut into segments that were bundled and transported by helicopter to staging areas within the park. The towers at Blanket Mountain, Spruce Mountain, and Bunker Hill were likely removed by a similar method, but no documentation exists

on them.⁴⁴¹

The three steel towers that remain retain high degrees of integrity of location, setting, feeling, and association. Substantial integrity of design, materials, and workmanship is also present. The NPS removed the cabin at Shuckstack in 1987, but a chimney and cistern remain at the site. After the Cove Mountain Tower was decommissioned in the late 1960s, the NPS rehabilitated the structure for use as an air-quality monitoring station. The Mount Sterling Tower is utilized in the park radio repeater system.

Mount Cammerer Fire Tower (Cocke County, TN). The Mount Cammerer Fire Tower is eligible for listing under National Register Criterion C as a distinguished example of NPS rustic architecture. The lookout has additional significance under Criterion A because of its associations with the CCC and New Deal conservation efforts. The stone lookout, with its battered walls that incorporate larger stones at the base, appears to grow organically from the mountain itself. Sited on a barren rock eminence, the tower could not rely on plantings to aid in landscape harmonization. Careful attention to form and the use of local stone and timber allowed the architects to achieve a harmonious result. As one of only two known stone fire towers in the eastern United States, the Mount Cammerer tower is an extremely important example of the 1930s NPS design approach. An individual nomination should be prepared to list the tower in the National Register.

Unused since the 1960s, the Mount Cammerer Fire Tower had suffered substantial deterioration of its wood members by the late 1980s. All the timber balcony and external stair were lost, and window openings were boarded up. In 1962, the NPS replaced the original hand-dressed wood shingles with asphalt roofing.⁴⁴² In 1995, the Fire Tower was restored. The wooden catwalk and exterior staircase were rebuilt, exterior doors were replaced, a new cedar shake roof was placed on the structure, and a new pressure-treated pine floor was installed. Following the restoration, the building retains a high degree of integrity of location, setting, feeling, and association. Substantial integrity of design, materials, and workmanship is also present. The rock-faced masonry characteristic of the NPS rustic style is intact and strongly conveys the original design intent and craftsmanship.

High Rocks Fire Lookout Cabin (Swain County, NC). The fire lookout cabin associated with the removed High Rocks Fire Tower is eligible for listing under National Register Criterion A as a component of the Great Smoky Mountains NP fire control program in place for much of the 20th century and under Criterion C as a representative example of the most common of the three lookout cabin designs constructed in the park. It is the only remaining detached lookout cabin in the park. HABS documentation was completed for the building in May 2009.⁴⁴³ An individual nomination should be prepared to list the cabin in the National Register.

The High Rocks Lookout Cabin remains in disrepair, but its integrity is intact. It possesses strong integrity of location, setting, feeling, and association and sufficient integrity of design, materials, and workmanship to convey its original appearance and function.

Mingus Mill (Swain County, NC). Draft National Register documentation for Mingus Mill was prepared in the 1970s but never approved by the Keeper. New National Register documentation is planned for this resource. Mingus Mill is significant under Criterion A for its association with agriculture and settlement in the Great Smoky Mountains and under Criterion C as an excellent example of a late nineteenth-century gristmill powered by a water turbine. Farmers in the Oconaluftee Valley brought their corn and wheat to the Mingus Mill for generations, and the mill is

⁴⁴¹ Ingle, "Every Day is Fire Day," 61-62.

⁴⁴² Trout, "Draft HSR, Mt. Cammerer Fire Tower," 11.

⁴⁴³ Ingle, "Every Day is Fire Day" 91-93.

one of only two custom or commercial mills surviving within the park. As such, it is an important reminder of the patterns of agricultural life established in the Great Smoky Mountains in the early nineteenth century and carried over into the first decades of the twentieth. The mill is also significant as an example of vernacular mill architecture.

The Mingus Mill is also significant under Criterion A as one of the first outdoor field museums created by the NPS during the initial park development period. Initially intended as a component of a larger mountain culture exhibit planned along Mingus Creek, the mill is now a secondary site near the Oconaluftee Mountain Farm Museum. The CCC restoration of the building to working order in 1936 served as a model for the living history programs envisioned by early park planners at Great Smoky Mountains NP and other national parks developed in the 1940s and 1950s. The mill remains one of the most popular stops for visitors interested in the settlers of the Smokies and their way of life.

Mingus Mill strongly conveys its original function and the role it played in the lives of farmers in the area and has a high degree of integrity of location, design, materials, workmanship, feeling, and association. The mill remains in its original location on Mingus Creek, with its original Leffel turbine, millstones, wheat-bolting reel, and other equipment. The turbine has been repaired but still contributes to the significance of the property. The mill building itself is substantially unchanged and exhibits its original timber frame and exposed floor joists. Integrity of setting is somewhat compromised by visitor facilities introduced at the site, mainly a parking lot and a comfort station. From all appearances, the landscape surrounding the mill is largely, if not entirely, a reflection of Park Service intervention into and management of this site. If a future CLI of the site reveals any historic landscape features from the Park Service era or before, the National Register documentation should be amended.

The Mingus Mill Dam, Flume, and Penstock have been repaired periodically and completely rebuilt more than once due to their constant exposure to water. Little, if any, original fabric appears to survive in these structures, it is not known how closely the rebuilt structures replicate the original features, and they are less than 50 years old. Careful study should be undertaken as part of the National Register nomination process to determine what original fabric remains of these structures, if they are required to meet Criteria Consideration E for reconstructed properties, and if they are contributing or non-contributing features of the Mingus Mill property. Regardless of their status in this regard, they are important components of the mill's function and setting.

Calhoun House (Swain County, NC). The Calhoun House in Proctor is significant under Criterion A at the local level as the only surviving resource associated with the settlement and community development of Proctor. The building was constructed c. 1920 by George Higdon, whose family had moved to Hazel Creek in the late 1800s. Higdon was mail carrier along the creek for an unknown period and also provided guide services for visitors in the Smokies.⁴⁴⁴ Granville Calhoun, a Hazel Creek native, bought the house in 1928 as one of many Proctor buildings that he would acquire over the years. Calhoun was a jack-of-all-trades prominent in the local community. He had worked as a logger, guide, store keeper, and post master and is noted for hosting Horace Kephart on his arrival to the Smokies. Calhoun used the house to take in boarders as part of his guiding enterprise. The NPS utilized the house as quarters following its acquisition of the North Shore Area in 1944.⁴⁴⁵ The Calhoun House may contribute to the significance of a potential historic district that encompasses the former company town of Proctor's surviving landscape features and archaeological components, as noted below in the "Resource Requiring Additional Evaluation" section discussion.

⁴⁴⁴ Higdon's name appears on a list of recommended guides for the Smokies in the 1927 *The Lure of the Great Smokies*. Robert Lindsay Mason, *The Lure of the Great Smokies* (Boston, MA: Houghton Mifflin Company, 1927), 303.

⁴⁴⁵ Micgal Strutin, *History Hikes of the Smokies* (Gatlinburg, TN: Great Smoky Mountains Association, 2003), 97-103.

The Calhoun House should be evaluated for National Register eligibility as part of the larger district, and individual or historic district National Register documentation prepared according to the results of that survey.

Luten Bridges, Ravens Fork (Oconaluftee) and Smokemont (Swain County, NC). National Register documentation should be prepared for the two Luten concrete bridges spanning the Ravens Fork of the Oconaluftee River (in Oconaluftee) and spanning the Bradley Fork of the Oconaluftee River at Smokemont. These structures are rare surviving examples of an early form of concrete bridge patented by engineer Daniel B. Luten. They are significant at the state level under Criterion C for their associations with early road building in the Great Smoky Mountains and for their associations with the history of engineering in the United States.

Although both bridges are in need of some maintenance and repair work, both survive in their original form, with integrity of location, design, workmanship, and materials intact. Neither bridge is open to vehicle traffic (except emergency traffic at Ravensford); thus, their integrity of feeling and association is diminished. However, the important aspects of design, workmanship, materials, and location are retained.

RESOURCES DETERMINED OR RECOMMENDED INELIGIBLE FOR LISTING IN THE NATIONAL REGISTER

The resources discussed in the following sections are tabulated and described in Appendix D.

Mt. Le Conte Lodge (Sevier County, TN)

The buildings of Le Conte Lodge are associated with the early twentieth-century recreation and tourism context at Great Smoky Mountains NP. However, most of the extant buildings have been rehabilitated repeatedly; some have been added to; several of the original buildings no longer stand; and the concessionaire has erected a number of new buildings. Therefore, the lodge complex does not possess sufficient integrity for National Register eligibility.

Most of the individual resources lack integrity of materials and workmanship because exposed wooden members have been renewed repeatedly in the exposed, humid environment of the mountaintop. At least one building, the Tack House (now employee quarters), lacks integrity of location because it has been moved from its original site. As a complex, the lodge has suffered substantial losses of integrity of setting, feeling, and association. No physical trace of the original overnight camp established by Paul Adams in the 1920s remains, compromising any associations with the Great Smoky Mountains Conservation Association. Only two buildings, the Lodge/Dining Room and Old Lodge, are representative of the construction program of Jack Huff in the 1930s; and the dining room building has been substantially rebuilt and added to. The numerous new buildings put up by the concessionaire in the 1960s through 1980s also limit the integrity of feeling and association.

All buildings on Mt. Le Conte, with the exception of the NPS maintenance building, are the property of the concessionaire, although the underlying land belongs to the federal government. The concessionaire is also responsible for their maintenance.

Willis Baxter Cabin (Cocke County, TN)

The Willis Baxter Cabin, also known as the Chandler Jenkins Cabin, is located on the Maddron Bald

Trail in Cocke County. The NPS determined and the Tennessee Historical Commission concurred in 2012 that the Willis Baxter Cabin is not eligible for listing in the National Register under the settlement and community development context.⁴⁴⁶

The Willis Baxter Cabin is not recommended eligible for listing under the early park preservation context. The cabin was retained during the initial park development period, but no substantial rehabilitation work occurred at the building until the 1960s and 1970s. Because of its isolated location, relatively limited accessibility, and lack of historic setting, the cabin does not function as an interpretive outdoor field museum in the same way as developed sites such as Cades Cove or Junglebrook.

Campgrounds and Picnic Areas (Sevier County, TN/Swain County, NC)

The Greenbrier Picnic Area (Sevier County, TN) is not considered eligible for listing in the National Register. The site existed in the 1950s as a small camping area with a nearby ranger station (included in the subsequent discussion of residential buildings). The 1964 Master Plan for Great Smoky Mountains NP proposed a substantial expansion of the site into a full-fledged campground/picnic area that included a camp store, orientation shelter, and amphitheater, and additional employee quarters. However, the project was never completed, and the site presently consists of twelve picnic sites, vault toilets, and a picnic pavilion constructed in 2000.

The Collins Creek Picnic Area (Swain County, NC) is not considered eligible for listing in the National Register. Although a picnic area at this site was proposed in the 1956 Mission 66 Prospectus, funding was not made available for its construction until 1967. Like the Metcalf Bottoms Picnic Area, the site represents the Mission 66 goals of expanding day-use areas within the park and providing visitors with scenic recreational facilities that included modern amenities like comfort stations. The picnic area follows the general layout of other Mission 66 public use areas, and the two extant comfort stations employ the standard NPS building typology and concrete masonry unit construction. However, the removal of two of the original comfort stations constructed at Collins Creek alters the overall integrity of the area and disqualifies it from National Register eligibility.

The Balsam Mountain Campground and Heintooga Picnic Area (Swain County, NC) are not considered eligible for listing in the National Register. These two nearby public-use areas were completed during the interim period of development between the end of World War II and the initiation of the Mission 66 program at Great Smoky Mountains NP. In the 1930s and 1940s, the NPS planned to construct a road from Black Camp Gap at the southeastern park boundary to an overlook at the edge of Heintooga Ridge (along the route of the Balsam Mountain Road). The Heintooga Ridge Road was staked in April 1941 but delayed by the war and not completed until 1953. After the war, Superintendent Ross proposed the alteration of the roadway plans to include a campground and picnic area at the overlook. The NPS constructed approximately forty-five campsites and forty picnic sites, along with two comfort stations at each area. The comfort stations are almost identical to those built at the Cades Cove Campground/Picnic Area in the same years (1953 and 1955), clad in split stone with moderately pitched, side-gabled roofs and horizontal windows placed just under the roofline. Neither the campground or picnic area as a whole, however, cohesively reflects the design principles of either the initial park development period or the Mission 66 development program at Great Smoky Mountains NP. Lacking strong associations with either context, the sites would not meet Criteria A or C.

⁴⁴⁶ Historic American Buildings Survey, "Chandler Jenkins Cabin, Cosby Vicinity, Cocke County, TN," HAER No. TN-120 (Washington, DC: Historic American Buildings Survey, National Park Service, 1996); E. Patrick McIntyre, Jr., TNSHPO, to Dale Ditmanson, Great Smoky Mountains NP, October 26, 2012, on file at Great Smoky Mountains NP, Gatlinburg, TN.

Mission 66 Residential Areas (Blount and Cocke Counties, TN/Swain County, NC)

Mission 66 funding allowed the NPS to partially alleviate the pressing need for additional employee housing within Great Smoky Mountains NP, although more park housing was proposed than was ever built. The residential buildings constructed at Cades Cove, Elkmont, Cosby, Oconaluftee, and Deep Creek and seven buildings constructed within an existing residential area at Sugarlands are all associated with the Mission 66 program. In addition, the extant ranger station or camptender residences built in 1955–1956 at Greenbrier, Tremont, Cades Cove, and Balsam Mountain reflect the NPS-wide shift to standardized residential designs based on a modernist aesthetic in the years leading up to Mission 66 and, thus, fall within the larger period of Mission 66 era park development.⁴⁴⁷

Although residential areas are identified as a resource type associated with the Mission 66 context presented in Chapter Seven, none at Great Smoky Mountains NP are recommended eligible for listing in the National Register. The majority of the employee residences within the park are typical examples of Mission 66 employee housing built inexpensively according to standardized plans, and none are completely unaltered. Minor alterations include vinyl replacements of original vertical wood siding or aluminum windows. Several of the houses present more substantially altered exteriors where the fenestration patterns have been changed or attached carports have been enclosed. The original roof structures on the carports and the multiple-unit houses at Oconaluftee have been altered, and most of the fenestration patterns on the Oconaluftee residences are also not original. Additional buildings proposed for this residential area were never completed, resulting in a lack of integrity for the complex as a designed Mission 66 landscape. While the four single-family houses at Sugarlands represent a unique house form within the park and retain much of their integrity of design and materials, they were built within an area laid out much earlier in the park's development (1930s through 1950) that includes curvilinear CCC-era roadways and three 1950 Cape Cod houses with various amounts of alteration. Thus, the complex lacks integrity as an architecturally unified Mission 66 residential area.

Mission 66 Maintenance Areas (Blount, Sevier, and Cocke Counties, TN/Swain County, NC)

Under the Mission 66 program, the NPS constructed maintenance areas at Cades Cove, Cosby, Look Rock, and Oconaluftee and additional maintenance buildings within the existing maintenance area at Sugarlands. Although maintenance areas are identified as a resource type associated with the Mission 66 context presented in Chapter Seven, none at Great Smoky Mountains NP are recommended eligible for listing in the National Register. The NPS has repeatedly rehabilitated many of these intensively used park buildings, introducing major exterior alterations such as changes to fenestration patterns and new roof structures that have compromised their integrity as examples of Mission 66 architecture. Newer buildings have been constructed within the two largest maintenance areas within the park, Sugarlands and Oconaluftee, diminishing their integrity of setting, feeling, and association.

Isolated Mission 66 Era Resources

The Cades Cove Visitor Information Kiosk (Blount County, TN) located along the entrance road to Cades Cove is not eligible for listing in the National Register. Originally constructed in 1958 with

⁴⁴⁷ The camptender residence built at Chimneys Campground ca. 1954 was relocated to the Sugarlands headquarters area when the campground was converted to a picnic area in the late 1960s. Conflicting documentation indicate that the building either corresponds to Building No. SU 469, the extant but substantially altered Little River Ranger Station, or Building No. SU 322, which stood on the current site of the Log House Seasonal Quarters and burned down in November 1991 (FMSS for Great Smoky Mountains NP; Great Smoky Mountains NP Building Numbers, Cultural Resource Management Office files).

Mission 66 funding, the structure was entirely rebuilt in 2008 and no longer resembles its original design. As initially built, the kiosk consisted of a shed roof supported by a steel frame and covering an approximately 560 square feet open area. The current structure is a larger wood-frame shelter with a substantial front-gabled roof and low stone walls along three sides. It lacks integrity of design, materials, workmanship, feeling, and association.

The Cades Cove Riding Stables Comfort Station (Blount County, TN) is not eligible for listing in the National Register. As an individual Mission 66 era resource, it would be eligible only as a contributing resource within a larger Mission 66 historic district. Originally proposed in the 1956 Mission 66 prospectus but not built until 1968, the building employs a standard NPS comfort station typology and concrete masonry unit construction. However, the comfort station is geographically isolated from any potential district.

Foothills Parkway (Blount, Sevier, and Cocke Counties, TN).

The completed sections of the Foothills Parkway (including the Gatlinburg Spur and the Gatlinburg Bypass) are not recommended eligible for listing in the National Register under any of the contexts discussed in this HRS. The concept of a scenic parkway through the foothills of Tennessee along the north side of the park originated well before the Mission 66 program, but Congressional authorization and right-of-way acquisition did not begin until after World War II. Subsequent planning efforts for Great Smoky Mountains NP took the proposed parkway into consideration, but state and regional concerns also affected its development. Mission 66 provided the funding for the design and construction of approximately one-third of the route. The unfinished parkway project continues to evolve under the direction of federal, state, and regional organizations. In its current form, it is not eligible as a significant example of NPS road design or construction from the Mission 66 period.

Heintooga Ridge Road (Swain County, NC)

The Heintooga Ridge Road (a.k.a., Heintooga Round Bottom Road) is not recommended eligible for listing in the National Register under any of the contexts discussed in this HRS. Planned and laid out in the early 1940s, construction of the road did not begin until funding was available in 1949. By that time, Great Smoky Mountains NP faced some of the concerns that drove the development of the Mission 66 program, namely overcrowding and deteriorated park infrastructure. The completion of the Heintooga Ridge Road provided much-needed visitor access to the popular overlook at the edge of the ridge, as well as two new public-use areas constructed nearby. However, the road lacks strong associations with either the initial park or Mission 66 development periods and does not fully embody the NPS design principles codified under either program. Consequently, it would not meet Criteria A or C for listing under either context.

North Shore Road (Swain County, NC)

The two completed segments of the North Shore Road (a.k.a., Bryson City-Fontana Road or Lake View Road) are not recommended eligible for listing in the National Register under any of the contexts discussed in this HRS. Initially proposed as a provision of the July 30, 1943, Memorandum of Agreement among the US Department of Interior, Tennessee Valley Authority, Swain County, North Carolina, and the state of North Carolina related to the creation of Fontana Dam and Reservoir, the road was intended to follow the north shore of the newly formed Fontana Lake through Great Smoky Mountains NP. Construction of the road began in 1947, but only about 7 miles were completed (in two discontinuous sections) before the project ended in 1972 due to environmental concerns and funding issues. An Environmental Impact Statement (EIS) completed in 2007 addressed the outstanding issue of the federal government's obligations to complete the road,

with the NPS preferred alternative being a monetary settlement. In its current form, the road is not eligible as a significant example of NPS road design or construction from the Mission 66 period.

RESOURCES REQUIRING ADDITIONAL EVALUATION

The Great Smoky Mountains NP contains archeological districts/landscapes that have standing structures or visible remains (ruins) associated with the contexts discussed in Chapters Two through Seven. Archeological resources are excluded from the scope of the present HRS; therefore, a full assessment of the significance of these resources cannot be provided. However, a brief overview of possible areas of significance and recommendations for further evaluation are provided for the potential archeological districts/landscapes that contain standing structures or ruins. Summary descriptions of the individual resources that fall within the HRS scope of work are provided in Appendix B.

Cades Cove Bloomery Forge (Blount County, TN)

The Cades Cove Bloomery Forge site, consisting of wood structural remains and artifact scatters, has been identified on Forge Creek in the southwest corner of Cades Cove. NPS personnel recorded the site location in 2004, and the site was subject to preliminary archeological mapping and testing in 2006–2007. A forge hammer was removed from the creek. Related sites for charcoal manufacture and ore (limonite) extraction have been identified anecdotally, and historical accounts indicate the presence of a second forge on Abram’s Creek within the park boundary.⁴⁴⁸

The Cades Cove Bloomery Forge should be evaluated under Criteria A, C, and D at the local level for significance in the context of Blount County industrial development and the settlement and community development of Cades Cove. The significance of the visible sites and features as a potential archeological and historic district would be determined as part of Phase I archeological identification and/or Phase II site evaluation investigations conducted by a qualified historical/industrial archeologist. Any sites identified in future surveys relating to limonite mines/quarries, colliers’ sites, and the Adams Creek Forge could contribute to a larger, discontinuous archeological district. If other archeological sites relating to early nineteenth-century iron production have been identified within the Eastern Iron Belt of Tennessee, the Cades Cove Bloomery Forge may take on additional significance at the state level within the context of the history of Tennessee iron production.

Proctor (Swain County, NC)

The site of the former company town of Proctor contains ruins (sites), structures, and small-scale features associated with the activities of the Hazel Creek Lumber Company (W. M. Ritter Lumber Co.), c. 1903–1926. These resources are organized around a former railroad grade within the valley of Hazel Creek, Swain County. The Pump House, Valve House, and ruins of the Drying Kiln are set on the banks of a former man-made Log Pond (now drained). These constitute the remaining visible components of the company mill. Archeological testing in 2007 identified the remains of the railroad switchyard.⁴⁴⁹ One standing building in the area, the Calhoun House (discussed above), is associated with the community development of Proctor but not directly with the logging company. Based on a review of historical documents, other possible components of Proctor may include archeological

⁴⁴⁸ The preliminary study was made by Elizabeth Cahill, a master’s degree candidate in the Anthropology Department at the University of Tennessee, in cooperation with the NPS park staff. Cahill mapped the site and excavated shovel test pits but never completed her project. The site is not currently inventoried or evaluated in the inventory of the Tennessee Division of Archaeology’s (TDOA) site database. Elizabeth Cahill, “Foute Bloomery Forge: Great Smoky Mountains National Park, Blount County, Tennessee” (Project Paper, University of Tennessee, May 2006); Cahill, “The Cades Cove Bloomery Forge”; Suzanne Hoyal, Site File Curator, TDOA, email communication with Dianne Flaugh, Cultural Resources Manager, February 3, 2015.

⁴⁴⁹ Erik S. Kreusch, Supervisory Archeologist and Cultural Resources Program Manager, personal communication, April 8, 2013.

sites of railroad infrastructure, houses and community buildings, and/or additional industrial infrastructure.

Proctor is the only extractive industry location retaining identifiable resources that fall within the scope of this HRS. Those resources are:

- Ritter Company Pump House;
- Ritter Company Valve House;
- Ritter Company Drying Kiln (Ruin /Site); and
- Ritter Company Dam and Log Pond.

These resources are not documented currently in the NPS LCS or Facility Management Software System (FMSS) property management databases. None of these resources is recommended to be eligible for individual listing in the National Register; however, the entire Proctor landscape, including these resources, should be evaluated under Criteria A, C, and D at the local level for its significance in the context of the Swain County's logging history. The significance of the visible sites and features as a potential archeological and historic district would be determined as part of Phase I archeological identification and/or Phase II site evaluation investigations conducted by a qualified historical/industrial archeologist. If the archeological site investigations found substantial evidence of archeological sites relating to the settlement and community development context for Proctor, the Calhoun House might contribute to a larger archeological district that incorporated both logging- and community development-related resources.

The Adams Copper Mine (Swain County, NC)

The Adams Copper Mine landscape contains ruins (sites) and small-scale features associated with historic-period copper mining activities of the North Carolina Mining Company or its predecessors, c. 1889–1944. The resources are organized along the east and west sides of a narrow wooded valley of the Sugar Fork Tributary of Hazel Creek. Visible components of the landscape include a mortared stone foundation/machinery footing, a stone retaining wall and associated waste rock pile, a possible building site (brick and wood rubble pile), and at least two mine shafts/adits.

The NPS has not studied or evaluated the Adams Copper Mine landscape. None of the landscape elements are recommended to be individually eligible for listing in the National Register. Instead, the Adams Copper Mine landscape should be evaluated as a potential archeological district under Criteria A, C, and D at the local and/or state levels for its significance in the context of Swain County economic development and state-wide copper mining. The significance of the visible sites and features as a potential archeological and historic district would be determined as part of Phase I archeological identification and/or Phase II site evaluation investigations conducted by a qualified historical/industrial archeologist. It may be appropriate to combine this landscape with other copper mines and prospects within the park as part of a discontinuous archeological district.

The Fontana Copper Mine (Swain County, NC)

The Fontana Copper Mine landscape contains ruins (sites), objects, and structures associated with the North Carolina Exploration Company or its predecessors, c. 1901–1944. The landscape is organized into two subcomponents: the mine head on the Mine Branch of Eagle Creek and the administrative and residential complex at the confluence of the Ecoah and Mine branches (now mostly within Fontana Lake). The two are connected by fragments of a railway incline structure running within the Mine Branch valley.

Visible remaining elements of the mine head infrastructure include a cast concrete foundation or

machinery footings, concrete piers, a stone retaining wall, a large riveted sheet iron tank, a cable hoist, and three open shafts/adits. These objects and ruins are sited on terraces along both sides of the wooded valley on a roughly north-south axis. Visible remains at the administrative and residential complex include a collapsed chimney, unidentifiable brick scatters, and a cistern. Much of this complex lies below the high water mark of Fontana Lake.

The Fontana Copper Mine landscape has not been subject to NPS study or evaluation. None of resources are recommended to be individually eligible for listing in the National Register. The Fontana Copper Mine landscape should be evaluated as a potential historical and archeological district under Criteria A, C, and D at the local and/or state levels in the context of Swain County economic development and state-wide copper mining. The significance of the visible sites and features as a potential archeological and historic district would be determined as part of Phase I archeological identification and/or Phase II site evaluation investigations conducted by a qualified historical/industrial archeologist. Determination of the location of archeological resources within the administrative and residential complex relative to NPS/TVA jurisdiction might need to occur as part of such an archeological survey. As noted in the discussion of the Adams Copper Mine, this landscape may be eligible for listing in the National Register in combination with other copper mines and prospects within the park as part of a discontinuous archeological district.

CHAPTER NINE: MANAGEMENT RECOMMENDATIONS

Identifying and evaluating significant cultural resources in a mountainous park of more than one-half million acres is a formidable challenge. Many cultural resources, such as cemeteries, homestead sites, the remains of lumbering and mining operations, and road traces, are in remote locations where access is difficult. The lush vegetation of the Smokies often obscures traces of earlier activity, so that resources located twenty years ago may now be lost to view. Despite these obstacles, it is very important that the evidence of thousands of years of human occupation in the Smokies be recorded, preserved, and interpreted.

RESOURCE INVENTORY AND EVALUATION

The most immediate need is to complete baseline inventories of the cultural resources in Great Smoky Mountain National Park. This HRS provides baseline documentation for the majority of the buildings and structures in the park, spanning the settlement and community development to the Mission 66 park development eras. Those cultural resources that still require documentation include elements of the road and trail systems, historic cemetery and other cultural landscapes, and archeological sites and ruins. Cultural resource identification and documentation should proceed in tandem with GIS mapping of identified and potential historic properties so that Great Smoky Mountain NP staff may fully integrate geospatial data into their preservation and project planning efforts.

The identification and evaluation of historic roads is a substantial but important task in the on-going cultural resource management of Great Smoky Mountain NP. A CLI for the Cherokee Orchard Road-Roaring Fork Motor Nature Trail was completed in 2007, and a draft Cultural Landscape Assessment (CLA) for the portion of Newfound Gap Road in Tennessee was completed in March 2008. Several major historic roads covered in this HRS—Parsons Branch Road, Rich Mountain Road, and the Cataloochee Turnpike—were included in CLIs and/or CLR for districts such as Cades Cove and Cataloochee but have not yet been subject to their own CLIs, nor have all of their respective bridges been surveyed. Hundreds of miles of horse, truck, and foot trails laid out by the CCC (and in some instances, adapted from earlier logging railroads or community roads) in the 1930s remain to be surveyed and evaluated. The roads noted above, as well as all park roads from the initial development period (1926–1942) and the Mission 66 period (1945–1972) beginning with the heavily traveled Newfound Gap Road and other developed areas (Sugarlands Headquarters, Smokemont Campground, etc.), should be evaluated as cultural landscapes. Where present, cemeteries (discussed below), stone walls, and other features adjacent to the roads should be included in such landscape surveys.

Additionally, roads and bridges that are over 50 years of age and post-date the settlement and community development context have not been evaluated under Criterion C for engineering significance or as works of important engineers.⁴⁵⁰ The engineering significance of Newfound Gap Road and Clingmans Dome Road would be of particular interest. Bridges should be studied to determine if they are significant structural works within the context of NPS bridge engineering or within state-wide bridge contexts prepared by the Tennessee and North Carolina Departments of Transportation (as appropriate) or as important works by noted bridge engineers. The completed bridges on the Foothills Parkway may also be eligible under an engineering context. As roadways are inventoried and their significance assessed, the hundreds of stone-faced culverts, tree wells, and

⁴⁵⁰ The development and application of such contexts was outside the scope of this HRS.

similar small-scale features in the park may be marked by permanent, numbered stakes so that they can be easily located.⁴⁵¹

A cemetery survey resulted in the completion of CLIs for the Cable Cemetery, Cades Cove; Methodist Church and Cemetery, Cades Cove; Missionary Baptist Church and Cemetery, Cades Cove; and Primitive Baptist Church and Cemetery, Cades Cove. Additional cemetery surveys and National Register evaluations should be completed as NPS resources allow.

Survey of cultural landscapes in Great Smoky Mountains NP has included CLIs for the Voorheis Estate and thirteen component landscapes at Cades Cove (including the aforementioned cemeteries). A CLI for the Chimneys Picnic Area is underway, and a draft CLR for Cataloochee has been completed. The MOA for Elkmont requires the preparation of a CLI for the area.⁴⁵² The draft CLRs for Cades Cove and Cataloochee should be updated and finalized. Cultural landscapes related to all the historic contexts and significant historic properties identified in this HRS are candidates for future study. Pending evaluation, all cultural landscapes within the park should be treated as potentially eligible for listing in the National Register and managed as cultural resources. National Register documentation prepared or updated as a result of this HRS should include important aspects of the surrounding landscape or landscape features and should incorporate the findings of CLIs as they become available.

Standing ruins and associated historical archeological sites, particularly those related to the settlement and community development and extractive industries contexts, are numerous within the park; an Archeological Overview and Assessment (AOA) has yet to be completed. As with historic architectural resources, the timely identification, evaluation, and nomination of archeological sites to the National Register is required of National Park units under the National Historic Preservation Act of 1966, as amended (Section 110a(2) and Standard 2). In compliance with this requirement, the completion of an AOA provides future research and management recommendations for individual and groups of sites. AOAs provide a critical evaluation of previous archeological studies; compile a descriptive inventory and summarize the research and interpretive value of known and potential archeological resources; and recommend whether existing National Register documentation for historic properties should be amended to include significance under Criterion D. Given the fragile nature of these resources and their potential significance within local and regional contexts, completing a comprehensive AOA through the NPS Archeological Site Management and Information System (ASMIS) for previously un-inventoried sites and integrating ASMIS data for other sites should be a priority.

Important post-contact archeological sites noted in this report include the remains of the Ritter Lumber Company operations at Proctor, the Adams Copper Mine, the Fontana Copper Mine, the Cades Cove Bloomery Forge, and the ruins of the Tyson McCarter Cabin. Numerous other sites associated with logging (e.g., mills and camps), mining (e.g., prospects, forges, and collier's pits and camps), and settlement and community development (e.g., homesteads, church or mill ruins) likely exist in the park. Hundreds of homesteads and farmsteads dotted the valleys of the Great Smokies when the park was established. Most buildings on these properties were burned or otherwise removed from the park, but chimneys, stone fences, road traces, and other more durable reminders of settlement remain. All of these archeological sites should be located; surveyed; added to archeological, cultural landscape, or historic structure inventories, as appropriate; and evaluated for National Register eligibility within their respective contexts. Where activities such as copper mining

⁴⁵¹ Corrugated metal pipe culverts (CMP) connected to stone culvert headwalls are not visible or significant design elements of roadways, only the headwalls themselves are.

⁴⁵² National Park Service, "Memorandum of Agreement."

and iron mining encompassed larger regions within North Carolina and Tennessee, comparative archeological data from other non-NPS sites should be considered to understand the significance of a site at both the local and state levels.

Finally, additional resources located within the park that do not relate to the contexts established in this HRS may still require evaluation as potential historic properties. The aforementioned potential engineering significance of bridges is one example. Only single examples of other additional resource types may exist within the park, such as the mid-century modern house at Purchase Knob designed by a documented architect of western North Carolina and completed in 1964. As NPS undertakings are planned or new resources over 50 years of age are discovered or identified, NPS personnel should be proactive in surveying and evaluating these resources to determine what, if any, significance they might have under as-yet-unidentified contexts.

NATIONAL REGISTER DOCUMENTATION

Multiple Property Submission and Multiple Property Documentation Form

As noted in Chapter One, the recommended approach to nominating properties at Great Smoky Mountains NP to the National Register is to prepare a Multiple Property Submission (MPS). An MPS consists of a Multiple Property Documentation Form (MPDF, NPS 10-900-b) and registration forms (NPS 10-900) for associated individual properties and/or districts. As explained in *National Register Bulletin 16B: How to Complete the National Register Multiple Property Documentation Form*, the MPDF is designed to organize information about resources that are related by theme, type, geographical location, or some other associative characteristic. It includes a statement of applicable historical contexts; defines eligible property types, including the characteristics of significance and aspects of integrity that must be present for a property to be eligible for listing in the National Register as part of the MPS; and establishes the geographical limits of the location of eligible properties. As a management tool, the thematic MPS approach furnishes essential information for historic preservation planning because it can be used to compare properties that are related by type, period of significance, location, or some other associative quality within a defined geographical area and establish preservation priorities based on relative historical significance.⁴⁵³

This HRS was structured to facilitate the preparation of an MPDF for the park by providing most of the information required to complete the major sections of the form. The thematic contexts presented in Chapters Two through Seven can be easily transferred into MPDF Section E. Statement of Historic Contexts. Property specific information, including the inventory of resources included in the HRS and the National Register evaluations included in Chapter Eight, may be used to develop Section F: Property Types. Section G. Geographical Data and Section H. Summary of Identification and Evaluation Efforts can be drawn largely from Chapter One. Finally, Section I. Major Bibliographical References can incorporate the sources that were used to prepare the HRS.

⁴⁵³ Antoinette J. Lee and Linda F. McClelland, *National Register Bulletin 16B: How to Complete the National Register Multiple Property Documentation Form* (Washington, DC: U.S. Department of the Interior, NPS, 1991, revised 1999).

Individual National Register Registration Forms

The following properties are recommended for documentation on individual National Register registration forms as part of the MPS for Great Smoky Mountains NP. A complete National Register evaluation of each of these properties is included in Chapter Eight.

- The Mingus Mill complex is recommended as eligible under the settlement and architecture contexts and the early NPS preservation context.
- The Calhoun House on Hazel Creek is recommended as eligible under the settlement context. Archeological survey and National Register evaluation of the surrounding Proctor site needs to be completed to determine whether the Calhoun House should be listed individually in the National Register or as a contributing resource within a larger archeological site/landscape.
- The Bradley Fork and Ravens Fork Luten bridges are both recommended as eligible under the settlement context.
- The Cataloochee area is recommended as an eligible historic district with resources that are significant under the settlement and architectural contexts. The potential district also includes one resource—the Palmer Tourist Cabin—that is significant under the recreation and tourism context.
- The Voorheis Estate is recommended as an eligible historic district with resources that are significant under the recreation and tourism context.
- The Shuckstack, Mount Sterling, Cove Mountain, and Mount Cammerer Fire Towers and the High Rocks Fire Lookout Cabin are recommended as eligible under the initial park development context.
- The Newfound Gap Road, Clingmans Dome Road, and Little River/Laurel Creek Road are recommended as eligible historic districts with resources that are significant under the initial park development context.
- The Sugarlands Headquarters Area is recommended as an eligible historic district with resources that are significant under the initial park development context and the Mission 66 park development context.
- The Oconaluftee Administration Building Area is recommended as an eligible historic district with resources that are significant under the initial park development context.
- Chimneys Picnic Area is recommended as an eligible historic district with resources that are significant under the initial park development context. It is also eligible under Criterion A for its associations with the Mission 66 park development context.
- Smokemont Campground is recommended as an eligible historic district with resources that are significant under the initial park development context and the Mission 66 park development context.
- The Oconaluftee Mountain Farm Museum is recommended as an eligible historic district with resources that are significant under the early NPS preservation context.
- The campgrounds at Cades Cove, Cosby, Deep Creek, Elkmont, and Look Rock and the picnic area at Metcalf Bottoms are recommended as eligible historic districts with resources that are significant under the Mission 66 park development context.

The existing National Register documentation for resources within Great Smoky Mountains NP is concentrated heavily on buildings and structures from the settlement period and does not adequately address later periods of development or cultural landscape features. The following amendments to existing registration forms are recommended, as detailed in the preceding chapters of this HRS:

- Cades Cove Historic District
 - Remove the Noah Birchfield Pig Pen as a contributing structure (because no longer extant).
 - Add the Dan Lawson Barn, John W. Oliver Barn, Primitive Baptist Church Cistern House, Parsons Branch Road, Rich Mountain Road, and Cades Cove Loop Road as contributing resources.
 - Add the Cable Mill Visitor Center and Cable Mill Comfort Station as non-contributing resources.
 - Include the district's significance under the early NPS preservation context.
- Roaring Fork Historic District
 - Add the Ephraim Bales Stone Walls, the Jim Bales Barn, the Jim Bales Corn Crib, the Alex Cole Cabin (previously listed in its original location and moved to the district), and the Roaring Fork-Cherokee Orchard Road as contributing resources or landscape features.
 - Include the district's significance under the early NPS preservation context and the Mission 66 development context.
- Junglebrook Historic District
 - Add the Noah Ogle Stone Walls as a contributing feature.
 - Include the district's significance under the early NPS preservation context.
- Tyson McCarter Place
 - Add the Tyson McCarter Cabin Ruins and Tyson McCarter Place Rock Walls as contributing features.
 - Include the property's significance under the early NPS preservation context.
- Little Greenbrier School
 - Include the property's significance under the early NPS preservation context.
- Walker Sisters' Place
 - Add the Walker Sisters' Cistern as a contributing resource.
 - Include the property's significance under the early NPS preservation context.
- John Messer Barn (Smoky Mountains Hiking Club Barn)
 - Include the entire complex of buildings and surrounding landscape, including the associated Hiking Club Cabin (determined eligible) and Springhouse (recommended eligible), and its significance under the recreation and tourism context discussed in Chapter Four.
- Elkmont Historic District

Reflect the changes resulting from the implementation of the 2009 Memorandum of Agreement and determine if the remaining Appalachian Club buildings constitute a new National Register district. Moved resources present a special challenge for National Register evaluation and documentation. Moved resources within Great Smoky Mountains NP primarily date to the settlement and community development period and were relocated to suit NPS interpretive programs or other park management goals. In some instances, such as at Cades Cove, moved resources were listed

subsequently in the National Register as contributing resources within a historic district without the application of Criteria Consideration B: Moved Properties. In other examples, such as the Alex Cole Cabin, resources were moved subsequent to being listed in the National Register. Generally, the National Register criteria limit the consideration of moved properties. However, some of these resources are recommended eligible for listing in the National Register under the early NPS preservation context. Additionally, Criteria Consideration B allows properties to be eligible for listing if they are significant primarily for architectural value. Many of the relocated settlement and community development period resources have potential significance in the area of Architecture. However, these resources must retain enough historic features to convey their architectural value and retain integrity of design, materials, workmanship, and association. The following resources within Great Smoky Mountains NP have been moved:

- Cades Cove Historic District
 - John P. and Becky Cable House
 - John P. Cable Barn
 - John P. Cable Drive-Through Barn
 - John P. Cable Corn Crib
 - John P. Cable Smokehouse
 - John W. Oliver Barn
- Alex Cole Cabin (Roaring Fork Historic District)
- Will Messer Barn (Cataloochee)
- Oconaluftee Mountain Farm Museum
 - Floyd/Enloe Barn
 - Joe Queen Corn Crib
 - Joe Queen House
 - Jim Beard Corn Crib
 - Jenkins Chicken House
 - Conard Meat House
 - Caldwell Springhouse
 - Messer Apple House
 - Gregory Blacksmith Shop
 - Jenkins Pig Pen.

These resources appear to be good representative examples of their respective architectural types and would therefore meet Criteria Consideration B as it relates to architectural significance. However, insufficient data exist about the circumstances of the movement of the properties listed above to establish definitively whether they retain the requisite integrity for the criteria consideration. These data should be collected and a National Register eligibility evaluation made through the preparation of HSRs for these buildings or of National Register documentation for historic districts that encompass these moved resources. As noted in Chapter 2, resources listed in the National Register prior to December 13, 1980, are generally protected from removal from the National Register due to professional errors in judgment. However, those moved resources located within previously listed historic districts at Great Smoky Mountains NP that may be protected from removal from the National Register should still be documented fully in future HSRs and/or revised National Register documentation.

Treatment

The number and breadth of cultural resource types represented at Great Smoky Mountains NP presents a substantial property management challenge and could require a large amount of NPS human and fiscal resources. Defining the significant cultural resources of the park is the first step in responsible treatment, because an understanding of the characteristics that make a property eligible for listing in the National Register is essential in developing appropriate treatment plans.

Additionally, understanding the significance of a given resource allows for tailored, targeted treatment plans that utilize NPS personnel and funds effectively. *The Secretary of Interior's Standards for the Treatment of Historic Properties* and related NPS Interpreting the Standards Bulletins and Preservation Briefs should be adhered to in developing all resource treatment plans.

Specific treatment challenges that present themselves in the Great Smoky Mountains include: log architecture, CCC stonework, standing ruins (sites), and cultural landscapes. Resources constructed of logs are subject to natural weathering and decay and insect activity that can degrade this material. Ongoing monitoring and maintenance of these structures should be a priority, and care must be taken to replace degraded materials with in-kind new work, while also documenting these alterations for posterity. The rustic stone construction of the CCC era is a defining element in the visitor's experience of the park. These impressive, labor-intensive structures probably will never be attempted again in our national parks. These structures should be maintained and, where necessary, repaired, retaining as nearly as possible the level of workmanship that created them. Fallen stones should be recovered whenever feasible and replaced, and sources of compatible dressed stone for repairs should be sought. Archeological sites may be threatened by maintenance work, unauthorized excavation, visitor activities, and by natural degradation. Regularly scheduled ASMIS conditions assessments should be used to monitor the conditions of identified sites and to document threats or disturbances that may threaten their integrity. As necessary, park personnel should institute site-specific plans for vegetation and visitor management, grounds-keeping and maintenance, and other park activities such as planned burns. Significant cultural landscapes containing a variety of buildings, structures, features, and important vegetation should be maintained. Individualized treatment plans that include the input of horticultural experts are essential to preserving these rich resources.

Archives

The Great Smoky Mountains NP has extensive information about the history of the park and its cultural resources in the archives. However, much of the material, especially maps and plans, is not cataloged and is difficult to use. Therefore, consideration should be given to completing the cataloging and creating appropriate finding aids for the archival collection.

Interpretation

Park-based interpretation of the white settlement of the mountains historically focused on themes relating to the unique characteristics of mountain folk, the survival of archaic speech patterns and folklore, and handicraft traditions. More recently, however, it has been re-conceptualized in light of recent scholarship on Appalachia. Interpretation should continue to seek a balance between themes of isolation and the known record of multiple connections between mountain settlements and outside regions, celebrating Appalachian culture while balancing notions of Appalachian exceptionalism with a discussion of cultural commonalities with other geographic regions in the American South and East. The transmission and subsequent persistence or mutation of Appalachian life's cultural strands—religious, agricultural, or architectural—from other regions during various historic periods is a fascinating topic and rich area for interpretation. For example, the NPS retention of many log structures but few frame ones gives a false impression of stasis and cultural difference in

the mountain communities. To counter this, other interpretive media such as waysides, brochures, audio tapes, and museum exhibits showing now-demolished examples of frame architecture that once stood within Great Smoky Mountains NP may be used. Those frame houses and barns that remain in the park should be carefully studied and interpreted. The evolution of the mountain communities within the context of broader forces in the national economy and culture is another valuable interpretive theme. For example, the devastation from the Civil War and Reconstruction, the imposition of fence laws, and other forces increasingly turned upland farmers away from raising livestock in the later nineteenth century. This had profound repercussions for life on mountain farms that increased the difficulty of making an agricultural living and turned more young men toward employment in extractive and processing industries.

The exploitation of timber and mineral resources in the Smokies is an exciting area for potential interpretation. The identification and development of iron ore contributed to the settlement and early economic life of Cades Cove and is an untold story in the community's history that contains interesting social and environmental strands. During the late nineteenth and early twentieth centuries, logging and mining expanded rapidly, partly in response to changes in the national economy. Some scholars have gone so far as to define Appalachia as a semi-colonial internal region of the United States that exported raw materials to the Northeast and Midwest and imported finished goods. Whether this definition is true or not, extractive industries had a deep effect on both the natural environment and ways of life in the mountains. Remains of these operations, such as those at Proctor, Hazel Creek, and Eagle Creek, offer an opportunity for more extensive interpretation of logging and mining.

Nearly eight decades have elapsed since the creation of the park, which entailed the displacement of thousands of mountain residents and the removal of hundreds of buildings. It is now possible to interpret the process of park creation with an honest acknowledgement of the hardships imposed by forced relocation, as currently illustrated at the Oconaluftee Visitor Center. Park interpretation should also acknowledge that the landscapes at Cades Cove, Oconaluftee, Cataloochee, and elsewhere are significant primarily for what they reveal about attitudes toward preservation and about the preconceptions concerning mountain culture that prevailed in the 1930s and 1940s. NPS intervention in the initial park development period and later heavily manipulated and edited all these outdoor scenes, which consequently do not represent accurately any known period of historical development. As related in previous chapters, these landscapes have attained significance in their own right.

Development at Great Smoky Mountains NP in the 1933 to 1942 period was part of a vast national effort, funded and coordinated by the federal government, to pull the economy out of a depression, provide work for the unemployed, and conserve natural resources in the process. More could be done in the park to interpret the role of President Franklin Roosevelt's New Deal administration in developing Great Smoky Mountains and other national parks. The role of CCC laborers and craftsmen, in particular, would be a valuable area for interpretation. More could also be done to interpret the effects of the Mission 66 (active 1955–1966) and Parkscape programs (active 1966–1972) on the park's mid-twentieth-century development. Both programs were NPS-wide planning projects aimed at improving park visitor centers, maintenance areas, employee housing, infrastructure, etc. that had suffered from a lack of funding during World War II and a subsequent boom in visitation.

Cultural resource management and historical interpretation at Great Smoky Mountains NP will always need to be compatible with the need to protect and interpret the park's natural resources. There is no requirement, however, that these values be in conflict. The natural resources that the Great Smoky Mountains offer, as well as the changing values that humanity has placed on these

resources, have profoundly shaped the human history of the park. This great story offers the opportunity for many exciting new means to preserve and interpret the park's notable array of cultural resources.

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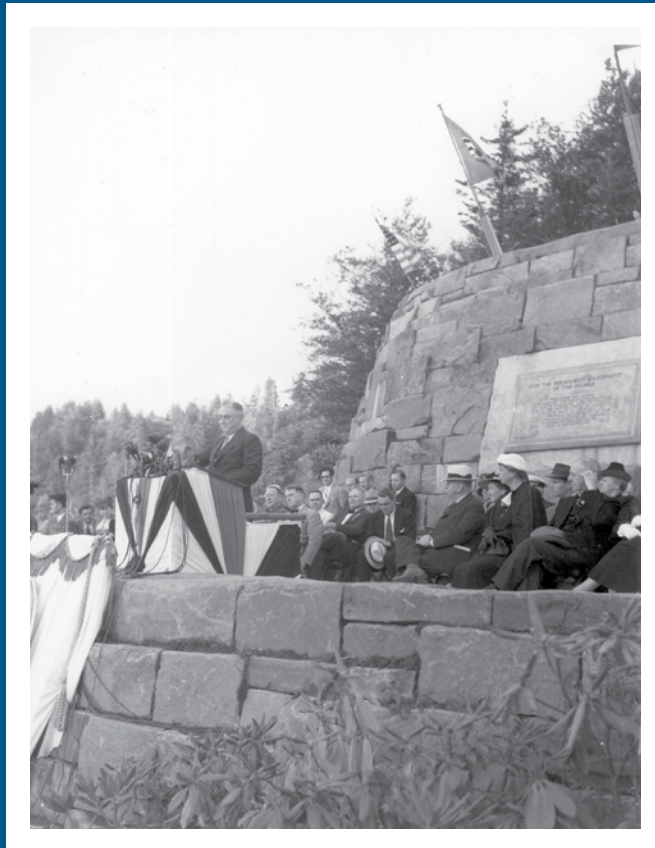
Olmsted Brothers Office Correspondence



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

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