

*In the Face of Change*



*Interpretive Prospectus  
Clemson Experimental Forest  
Clemson University, South Carolina*



*The woods are lovely, dark and deep,  
But I have promises to keep,  
And miles to go before I sleep,  
And miles to go before I sleep.*

*- Robert Frost*

An Interpretive Prospectus for the  
Clemson Experimental Forest  
Clemson University, South Carolina

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For  
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*Lynne R. Beeson*  
*March, 1977*

# Acknowledgements

*And standing thus it finally came to me that this is the most enormous extension of vision of which life is capable; the projection of itself into other lives. This is the lonely, magnificent power of humanity. It is, far more than any spatial adventure, the supreme epitome of reaching out.*

- Loren Eiseley

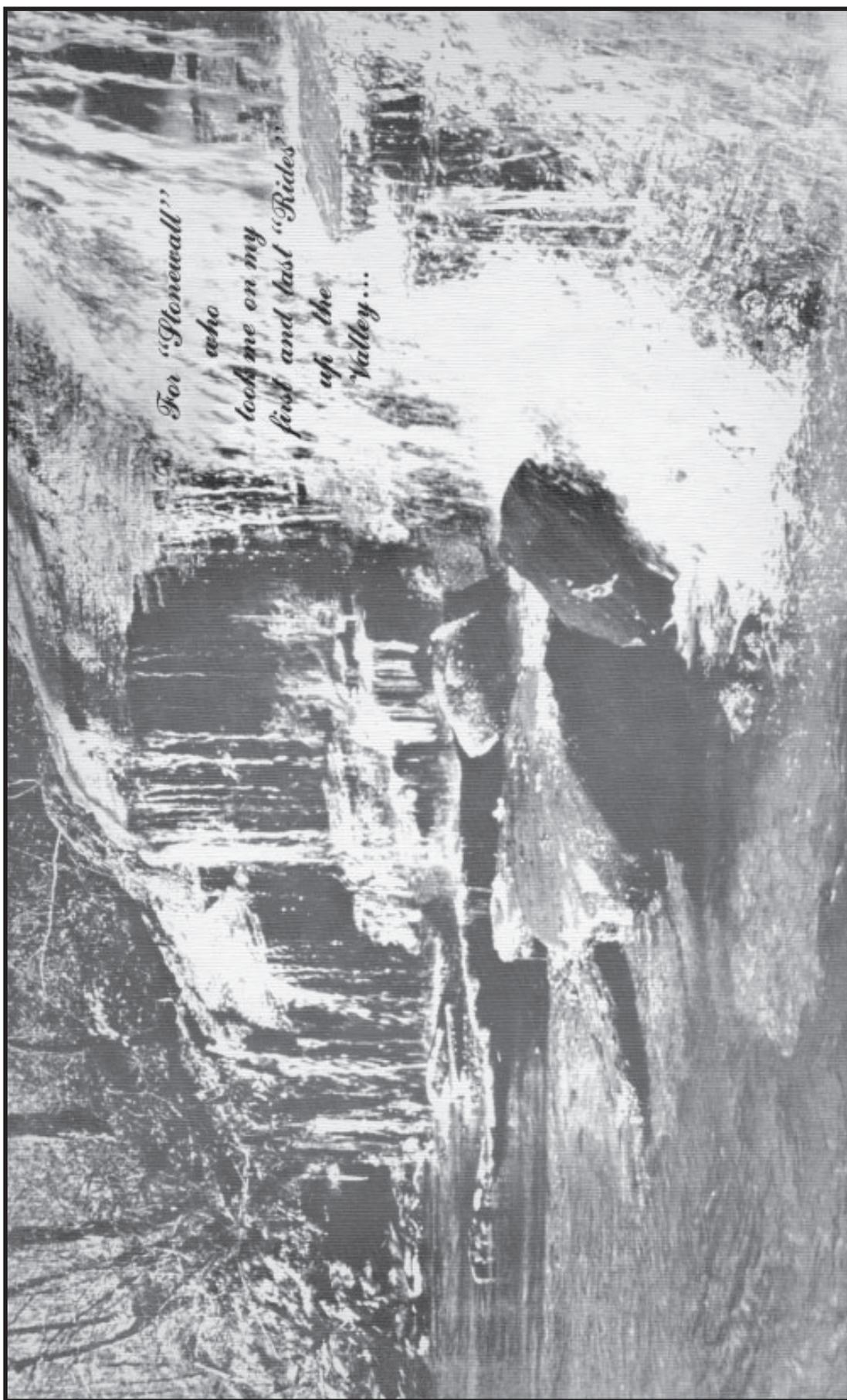
The author would like to extend personal thanks to the following individuals who contributed to this project opportunity: Mr. L.A. Pike, for hours of enjoyable insight into the region; Dr. R.M. Allen, Head, Department of Forestry, for suggestions and “curiosity” during the planning stage of this project; Ms. Ann Liston, whose talented sketches highlight a major portion of this document, and who spent endless hours in the composition and research of the artwork; “Page,” for the many hours spent in the technical work on the Forest maps, and more importantly, for providing encouragement and genuine interest in the study; Elaine Sokoloski, for initial revision of the rough draft, continued support, and varied “odds and ends” during the author’s years of graduate study; and Ms. Susan V. Allen, Fairfax County Park Authority, for comments, suggestions, and perceptive insight into the process of preparing an interpretive prospectus.

Deepest and most sincere appreciation is offered to the following, whose direction as committee members resulted in the usefulness of the prospectus: Dr. William H. Davis McGregor, for invaluable insight into the Forest, and the allowance of “poetic license”; Dr. Herbert Brantley, Committee Chairman, for guidance through the author’s undergraduate and graduate study, and in the final preparation of this project; Larry Reamer, whose good humor and “special awareness” made the document not only useful, but enjoyable, as well as for the opportunity to undertake the study realizing the limitations of a “preservationist”; and lastly, to Mr. Edward A. Merrell, Jr., for the personal dedication, enthusiasm, and commitment to the “methods in the madness” which we both came to know so well, but above all, for providing high standards of professionalism and friendship, for which the author is forever indebted.

To those very special people – Jim, Brenda, Jeff, Mike, Mary, Robin, Bill, Rebecca, “Sticks,” and Gordon – for extending the “epitome of reaching out” and contributing not only professionally, but personally during the years of study at Clemson University, sincerest gratitude is given.

Lastly, to my *Last Magician* or “Stonewall,” I respectfully dedicate this project.

For "Stonewall"  
who  
took me on my  
first and last "Rides"  
up the  
Valley...



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# Graphics

## **Artwork**

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Ann Liston - Pages vi, vii, viii, s, 4, 10, 15, 16, 19, 24, 25, 27, 30, 35, 39, 48, 50, 51, 52, 69, 72, 77, 78, 79, 81, 85, 86, 87, and 88.

Sherry Murphy - Pages 40 and 71.

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Page 11 and 13 - Courtesy of H. Jesse Grove.

Page 20 - From *Bicentennial Times*, December, 1976. Artist - Ben Hampton

## **Maps**

Lynne R. Beeson - Pages 12, 23, and 31.

Page Morgan - Page 67

## **Photography**

Lynne R. Beeson - Pages 2, 6, 7, 28, 32, 34, 36, 52, 53, 54, 56, 56, 59, 60, 61, 64, 70, 75, 82, and 83.

Department of Forestry - Pages 41, 44, and 55.

Gordon E. Howard - Pages iii and viii.

Pendleton District Historical and Recreational Commission - Page 37.

Soil Conservation Service - Pages 43, 46, and 47.

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Front Cover Design - Lynne R. Beeson

Inside Front Cover Design - Lynne R. Beeson; Sketch - Sherry Murphy

Inside Back Cover - Clemson Experimental Forest Map - Page Morgan

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# The Mission

The Clemson Experimental Forest within the larger purpose of the University as a repository of knowledge and as a forestry educational center for both present and future generations of South Carolina citizens.

The Forest provides an available, convenient, and essential outdoor laboratory for support of the educational and research objectives of the University. Realization of these objectives will contribute materially to the predicted dramatic increase of goods and services from forest lands of the State.

The Forest and its records document the relation of past efforts to future goals and provide a continuing basis for evaluating its effectiveness in support of:

- *Educational objectives, by providing a continuing display of the results of applied management for the effective training of future forest resource and ecosystem managers.*
- *Research objectives, by providing the required field conditions with their histories of development, in conjunction with the necessary supporting facilities of the University, for study and resolution of a wide variety of forest ecosystem problems.*
- *Social objectives, by demonstrating, through resource manipulation and renewal, the capacity of the forest to provide a sustained flow of fiber, water, recreation, wildlife, and still sustain a quality environment for the perpetual use and enjoyment of the people of South Carolina.*

*(The Clemson Forest Purpose - Objectives - Policies, 1973: 2)*



# *Abstract*

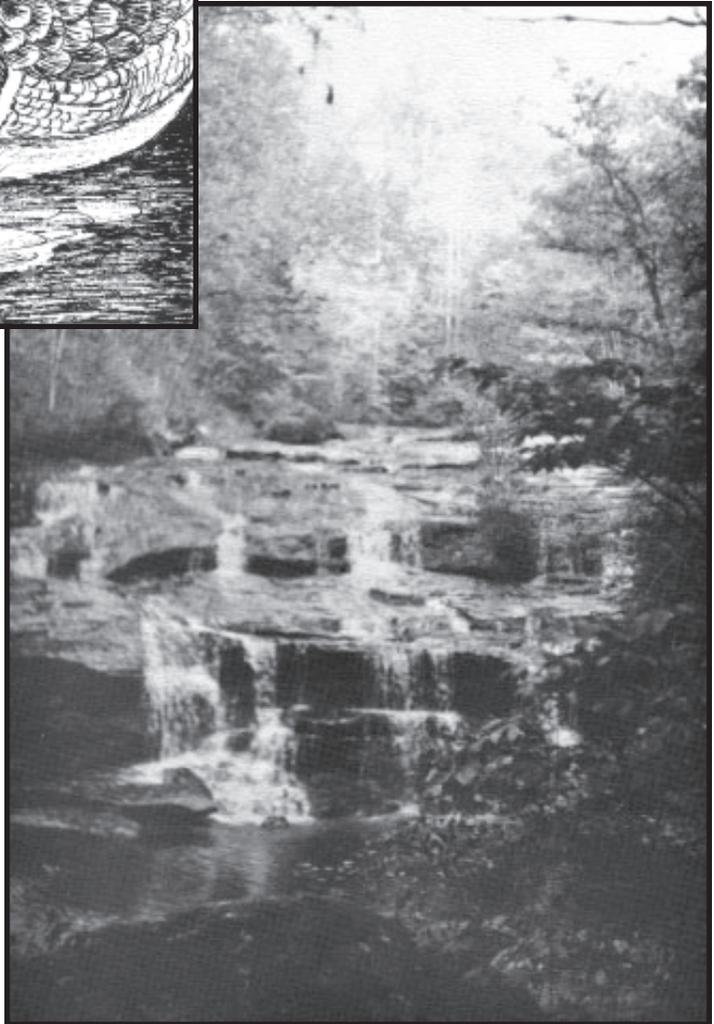
The Clemson Experimental Forest, 17,356 acres of land once the hunting ground of the Cherokee and the farmland of early settlers, surrounds the campus of Clemson University in the upper South Carolina piedmont. Deeded to the University in the mid-Fifties, the Forest is an outdoor laboratory for many disciplines of the University community.

The proposed interpretive prospectus seeks to explore and document the historical significance of the Forest. It will establish an interpretive goal and objectives for the Clemson Experimental Forest, as well as provide insight into major themes of the Forest which can serve to provide visitors with a more rewarding experience. Interpretive methods and tools will be presented which lend themselves to the resource base.



It is beyond the range of this study to furnish specific and detailed accounts for each facet of the history of the resource. Therefore, documentation will be focused upon the more significant events or features, with a brief account of the minor theme areas.

The end result of this study is an interpretive prospectus and plan which can be utilized in the future development of the Clemson Experimental Forest, and establish one basis for understanding the valuable potential that is contained within its land base.



# Introduction

*Man has a belief in seen and unseen nature. He is both pragmatist and mystic. He has been so from the beginning, and it may well be that the quality of his inquiring and perceptive intellect will cause him to remain so till the end.*

*– Loren Eiseley*



Modern man, in his race towards “bigger” and “better” advances through the realm of technology, appears to be losing touch with the most basic elements of life. These elements, an appreciation for simple beauty, fresh air, a glimpse of a wandering butterfly or the sounds of a sky alive with migrating waterfowl, have been cast aside by many in hopes of achieving advancement and self-glorification in a world of “future shock”. Having lost touch with simple things, many have lost touch with themselves, and with the mystical force which Rene’ Dubos terms “the god within.”

*Scientifically explained, the god within is the manifestation of the attributes and attitudes we each derive from our hereditary endowment and our experiential past – the biological forces which generate the energy and provide the direction for our lives. (Dubos, 1972: 5)*

Man has learned to “manage” the vast expanses of wilderness, mountains and rivers, and yet, he still does not accept and realize his dual purpose and nature – that nature being that man’s roots are in the stone age past, and man’s “divine passion” to conquer has carried him further from the realization that he is but a part of the entire picture. However, there are those who have turned their “passion” into other disciplines and are discovering that the answers to the many puzzling questions of the human race may be found in the world of natural systems. Such a system of answers is the human and natural resources of the Clemson Experimental Forest. Within the Forest, one may trace the development of an entire nation or the growth of the most colorful wildflower. Both are equally significant in the scheme of man.

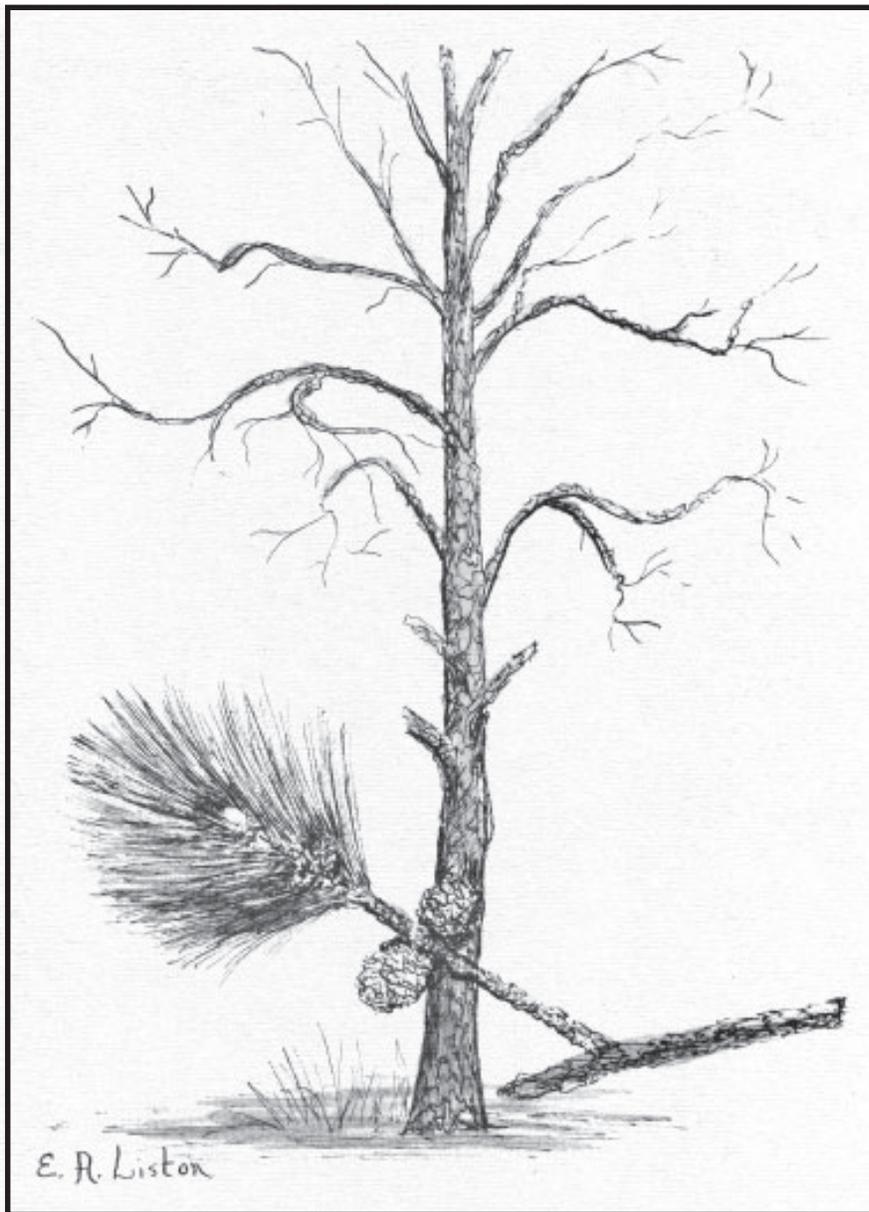
The heritage of the Forest is little documented, and consequently people are unaware of the riches within their grasp. This document is an interpretive prospectus for the resources of the Clemson Experimental Forest. It is not meant to be a detailed master plan of facility and site designations, nor an intricate plan for management of the Forest. Rather, it is conceptual in format and contains the broad aspects of interpretive methodology and planning within its framework. Contained within the prospectus are recommendations for the optimum types of interpretive methodology for the Clemson Experimental Forest, as well as their function in the overall program. Further, the prospectus should be utilized in the overall management and development of the Forest in terms of recreation and resource planning.

# The Resource

*Nature is the most thrifty thing in the world; she undergoes change, but there is no annihilation – the essence remains.*

– T. Binney

The Clemson Experimental Forest presently contains 17,356 acres in Oconee, Pickens and Anderson Counties in the upper piedmont of South Carolina. The present land base represents a



part of the 27,400 acres acquired by the federal government during land reclamation of the 1930's. Deeded to Clemson College in 1954, these lands have been developed as a vast laboratory to serve various academic disciplines. Foremost of these developments has been the reestablishment of the forest environment.

Cognizant of the basic purpose of the Forest, which is to serve as an outdoor laboratory in the discipline of forestry resource management, stewardship practices are guided toward achieving this objective.

Lands of the Clemson Experimental Forest surround the campus of Clemson University, located in the foothill region of the Southern Appalachians.

# Interpretation – The Art

*Recreational development is a job not of building roads into lovely country, but of building receptivity into the still unlovely human mind.*

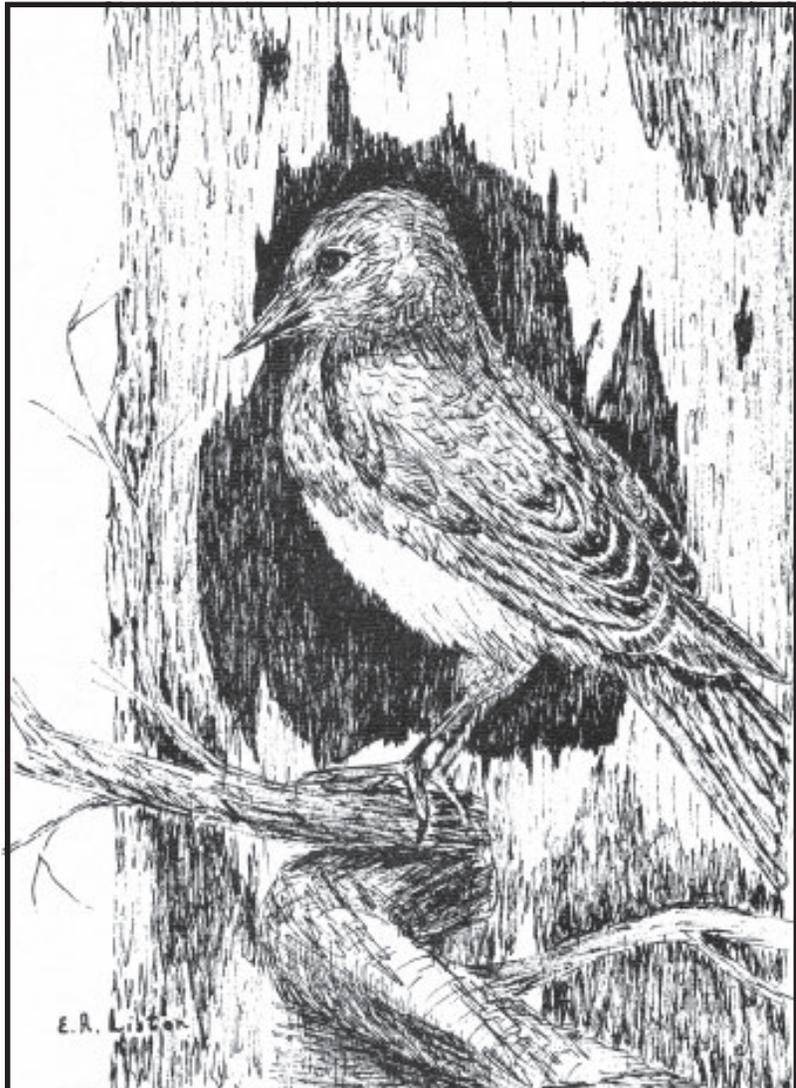
– Aldo Leopold

Instilling receptivity into the minds of mass visitors is one of the foremost objectives of interpretation. Creating an impression within a human mind is a difficult process, for it requires the establishment of an atmosphere which is cognizant of this “receptivity” development. Freeman Tilden, in his class work, *Interpreting Our Heritage*, voices this concept in his first principle of Interpretation:

Any interpretation that does not somehow relate what is being displayed or described to something within the personality of the experience of the visitor will be sterile (Tilden, 1967:9)

Interpretation must lend itself to portraying the entire experience of man in hopes of heightening the awareness of individuals, and establishing a sense of understanding. One must weave the underlying elements together into a presentation which appeals to at least one aspect of each human personality.

It follows that interpretation is the subtle revealing of concepts which form the parts of a workable whole. The ultimate goal of all interpretation is the formation of an environmental ethic, a humane view toward all things, living and nonliving.



# Goal – Objectives

*Our planning professions have a common goal in their aim to determine, to create, and then to keep current, optimum relations between people and their environment.*

– Norman Newton

Optimum resource management, together with sound operational procedures, is a function of proper planning processes. In order to begin the planning process, one must first recognize the inherent values of the resource. These values enable one to view the site in a logical framework, and to establish a broad, long-range goal, and subsequent specific objectives for the resource.

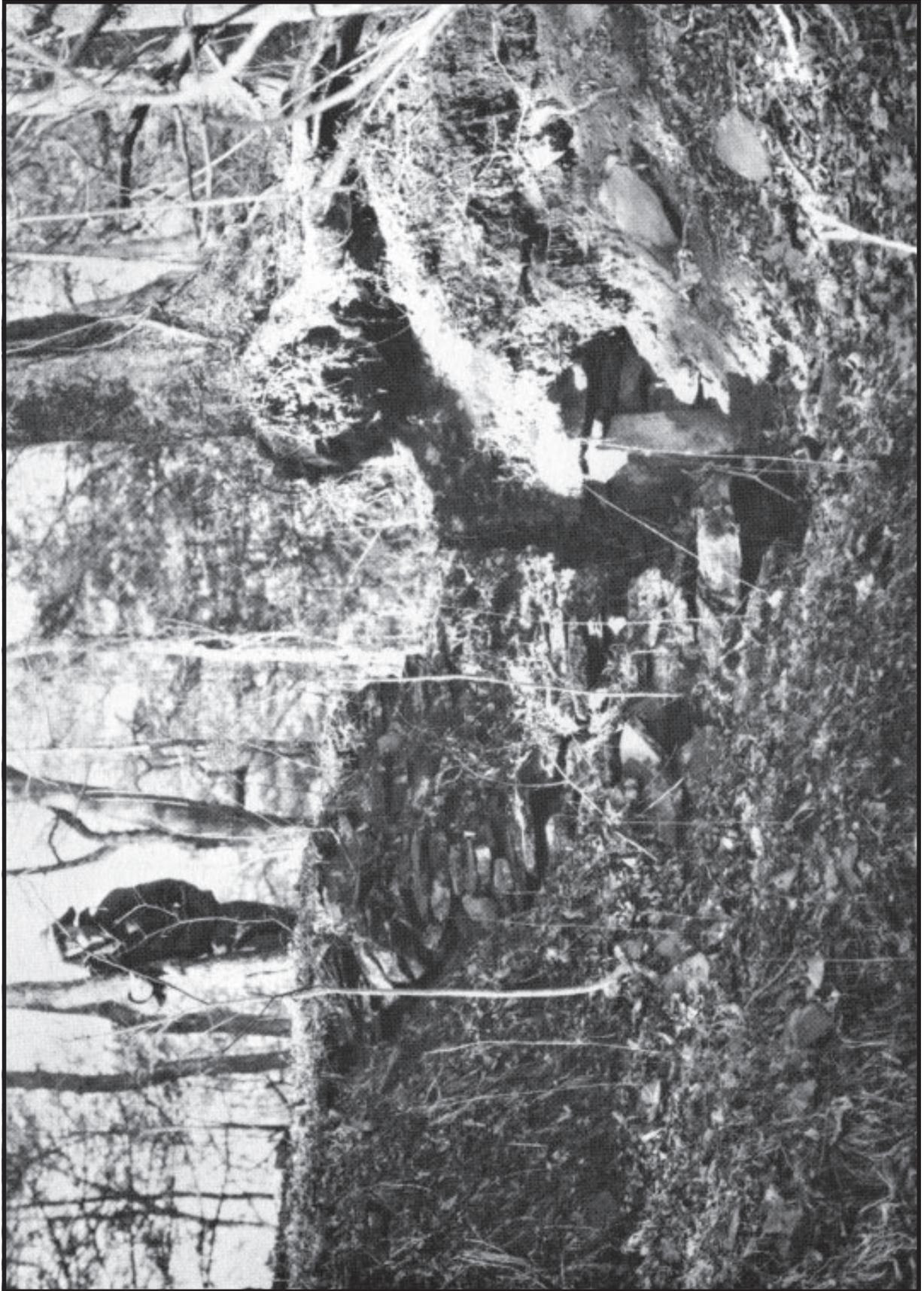
Interpretive planning is a continuous process. The establishment of clear and achievable objectives function to render the theme and subthemes of the process more understandable. Without specific objectives, the major impetus of the interpretive program will be unclear, and subsequently with-out purpose.

With these thoughts in mind, the following broad goal has been developed within the interpretive prospectus to aid in the interpretation for the Clemson Experimental Forest:

*To insure and provide the opportunity for visitors to gain an understanding of and insight into the environmental and historical heritage which exists within the cultural continuum of the Clemson Experimental Forest and its surrounding area.*

Having established the goal, the formulation of sound, feasible objectives follows. Referring to Freeman Tilden's principles of interpretation, the following objectives are formulated. The interpretive program should:

- (1) Create within the visitor an awareness of the historical and cultural development of the region.
- (2) Provide presentation compatible with the environmental qualities of the resource.
- (3) Present the visitor with an understanding of the establishment of the Clemson Experimental Forest and its role in the entire University community as well as the state.
- (4) Function to stimulate an appreciation of the environment, and the formation of an "environmental ethic."



# *Interpretation — “In the Face of Change” — The Theme*

*Land is the only thing in the world that amounts to anything, for 'tis the only thing in this world that lasts, and don't you be forgetting it! 'Tis the only thing worth working for, worth fighting for – worth dying for.”*

*Gone With The Wind  
– Margaret Mitchell*

Theme development closely follows the establishment of a goal and objectives in the interpretive planning process. Establishment of an encompassing theme for the resource further provides a framework from which the planning process can be advanced. Basically, a theme is a story, but not just any story. The theme captures the broad aspects of the resource in one compact, simple concept, which can be further highlighted through the use of subtheme and subject areas.

Such a concept (theme) for the Clemson Experimental Forest centers around the land. The land that is the present Forest has undergone many changes, in the past few hundred years, all of which have had some impact. These impacts may be tangible, yet in many instances, intangible. For the most intriguing aspect of the land is its ability to heal itself, to remain steadfast in the onrush of man, technology, use, and misuse.

Man plays an important role in the land's history, for he is a part of the whole picture, not apart from the things that took place. The thrust of the interpretive theme, “*In the Face of Change*,” is aimed at developing the following:

- (1) A perception of the environmental heritage of all mankind through the story of the Clemson Experimental Forest.
- (2) An awareness of natural systems.
- (3) A deeper respect for the uniqueness of the man-land relationship.
- (4) Provocation toward the creation of a “land ethic”.
- (5) The historical significance of the land base of the Clemson Experimental Forest in the upper South Carolina foothills.



(6) An understanding of land management.

The development of the theme is not the only step to be taken in the interpretive planning process. Critical to the workability of the theme are the subsequent subthemes, or minor theme areas, which serve to focus the entire revelation of the story into an understandable product. Subthemes are modifiers, which assist in smoothing out the story, utilizing subtleness or hard-core facts. There exists a broad range of subthemes to supplement the theme, *“In the Face of Change.”* For clarification and simplicity, the subthemes are placed within the context of a time framework, spanning the years 1600 - 1977. These time frameworks are further broken into specific subject areas, requiring additional research and development before inclusion in an interpretive presentation. The following diagram illustrates the interpretive theme process for the Clemson Experimental Forest.

# INTERPRETIVE THEME PROGRESS

IN THE FACE OF CHANGE

flora

fauna

LAND

1600 - 1785  
*Beginnings*

1934 - PRESENT  
*Renewal*

1785 - 1934  
*Exploitation*

The following narrative, *"In the Face of Change,"* is a short review of the story. Subthemes are the three time-frame classifications. Throughout the story, various subject areas are touched upon, but are not developed with great detail.

Interpretation begins with the prehistory of the Clemson Experimental Forest and works its way toward the present. The beginning of the Forest, *"In the Face of Change,"* is the story of the land and its resources before the dawn of man. It is the age of "The Great Forests."

# Interpretation — Content

## 1600 - 1785      *Beginnings*

*Even here, though the blue tops of the mountains were only here and there dimly seen in the distance, the country exhibited many pleasant and romantic scenes. The face of this region of romance, interspersed with forests, and prairies, and vast brakes of cane – the latter often stretching in unbroken lines of ever green for hundreds of miles, from the alluvial country on the south, to the interior sources of the streams was not surpassed in picturesque beauty and grandeur. . .*

– John H. Logan

### **The Great Forest**

One can only imagine the “majestic forests” which once covered the lands of the present Clemson Experimental Forest. The image was natural, fresh and spoke of wilderness. Foothills rose as a prelude to the Blue Ridge Mountains, and streams crisscrossed the rolling, gentle landscape. Swamps, floodplains, meadows, and rivers delighted the eye, but one feature dominated the entire scene: the Great Forest.

William Bartram, renowned naturalist of the 1770’s, chose to portray the region as follows:

*The mountain wilderness which I had lately traversed, down to the region of Augusta, appearing regularly undulated as the great ocean after a tempest; the undulations gradually depressing, yet perfectly regular, as the squama of fish, or imbrications of tile on a roof: the nearest ground to me of a perfect full green; next more glaucous; and lastly almost blue as the ether with which the most distant curve of the horizon seemed to be blended. (van Doren, 1928:274)*

Trees were the dominating characteristic of the landscape. Reigning over the land with a certain dignity that lent a sovereignty to the region, varied species of hardwoods and conifers created a green mosaic that, in the words of Eric Sloane: “...when...you can visualize the original countryside covered with such giant growth the effect is overwhelming. It was indeed a world beyond present-day comprehension.” (Sloane, 1955:10)

Historian John H. Logan of South Carolina described the forests as “*far more imposing than any now remaining in this portion of the ancient Cherokee Nation. The trees were generally larger, and stood so wide apart that a deer or a buffalo could be easily seen at a long distance – there being nothing to obstruct the view but the rolling surface.*” He further elaborated that “*on the elevated hilltops the strolling hunter often took his stand, to sweep, at a single view, a large extent of country.*” (Logan, 1859:7)



Such a world was a home to diverse species of flora and fauna. Additionally, man was here, and had been for centuries. For the Great Forest was the dominion of the native Americans – the Indians.

*The first Americans, or 'Paleo-Indians' as we call them, did not know that they were first anything, and certainly did not know that they were Americans.*

*- Dean Snow*

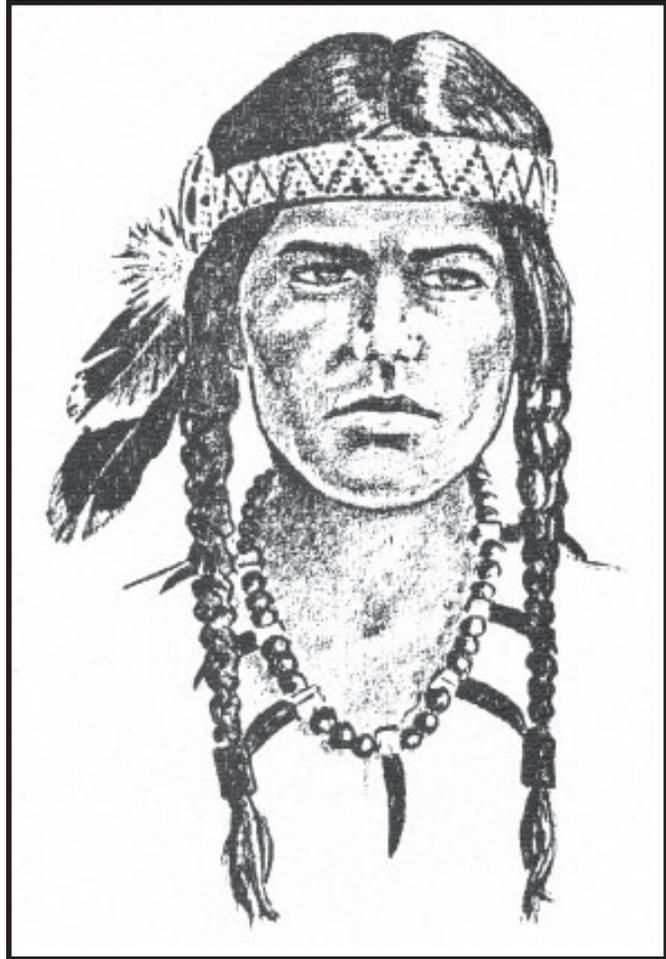
## **The Native Americans**

Man's roots lie in the stone age past. The native Americans who first hunted the lands of the present Clemson Experimental Forest knew a land beyond our comprehension. Evidence indicates these people were descendants of those who followed the vast herds of mastodons and other now extinct creatures, fleeing the giant sheets of glacial ice which were slowly disrupting the life and landscape they had known. One may spend hours delineating the history of the Indian in the South Carolina foothills. It is a story of ramifications that provide endless interpretive themes. The history of the Indian on and near the Clemson

Experimental Forest lands is equally as diverse. Following is an insight into the lives of the earliest settlers of the land, a simple story, yet thought-provoking, providing a base for further development.

Earliest evidence of man in the region of the Forest links sites to the Old Quartz Industry, an archeological classification placed some 5,000 years ago. These sites are readily found in upland areas overlooking streams and valleys. The Woodland Pattern, between 2,000 and 1,200 years ago, succeeded the Old Quartz Industry. Archeological investigations into the prehistoric Indian cultures in the region of the Forest lands were conducted prior to the inundation of the Seneca (formerly Keowee) River valley during November, 1952 to February, 1953. The conclusion reached was that the valley of the Keowee had been occupied by a continuum of prehistoric peoples. (NPS, 1953:1)

The most intriguing people to have occupied the Keowee Valley were the Cherokee, originally an Iroquoian tribe driven southward during pre-Columbian times. (Malone, 1952:2) The Cherokee were an industrious people, living in towns with a definitive governmental structure which functioned during war and peace independently.



William Bartram in his journeys during 1775, was quite taken with these comely people of sun-bronzed skin. He portrayed Cherokee women as being “tall, slender, erect and of a delicate frame; their features formed with perfect symmetry, their countenance cheerful and friendly, and they move with a becoming grace and dignity.” Of the tribe itself, he was most complimentary in stating that the Cherokees are... “by far the largest race of men I have ever seen; their complexions brighter and somewhat of olive cast, especially the adults...” (van Doren, 1928:381)

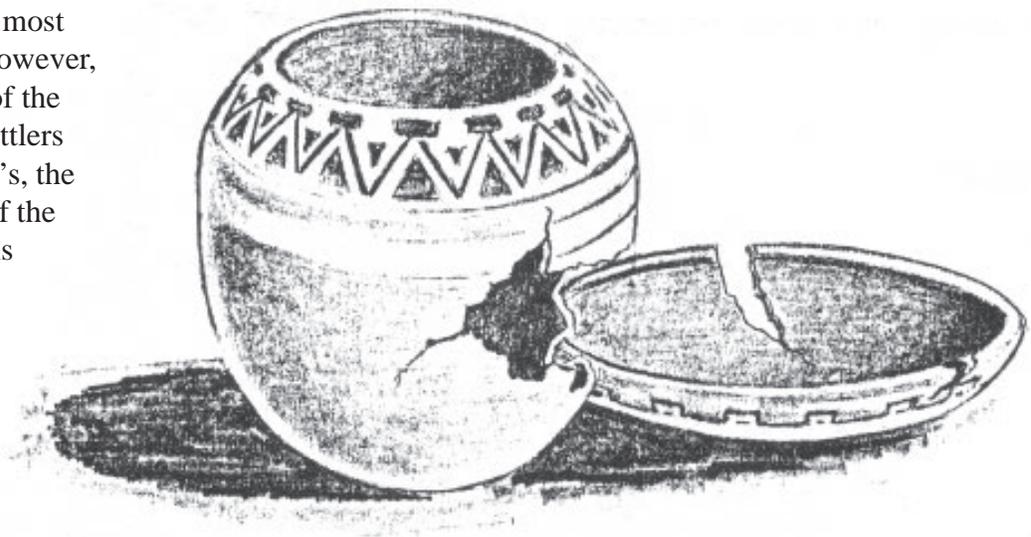
However, it was the Cherokee disposition that Bartram most admired. To him, they were “grave and steady; dignified and circumspect in their deportment; rather slow and reserved in conversation; yet frank, cheerful and humane.” (van Doren, 1928: 381)

William Bartram in his travels through the Carolina upcountry saw the peaceful side of the Cherokee. In the following years, this peaceful side would gradually turn into grim warlike countenance, and place the Carolina frontier in uproar.

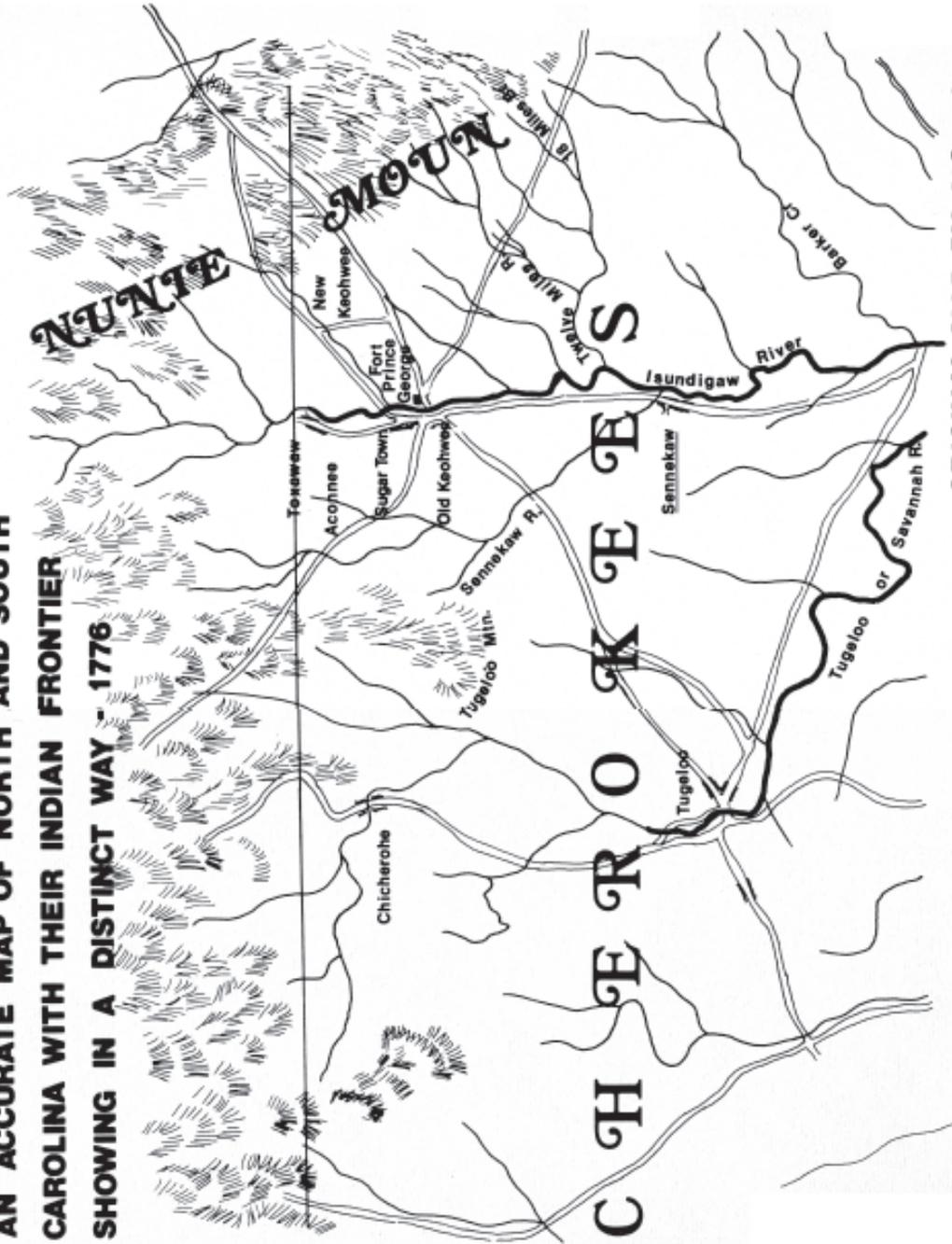
Additional tribes, besides the Cherokee, lived in the region. Among these were Creeks, Senecas, and the Nunda Wadigi Indians, a clan of Iroquois from upper New York State, who settled along the Keowee (Seneca). The Nunda Wadigi clan built the town of Essennecca (Seneca Old-Town) around or before 1630. The site of the town was located on the banks of the Keowee, opposite the west side of the present Clemson University campus. These Indians farmed the bottomlands of the river valley, raising such vegetables as corn, beans and squash.

Within the confines of the Forest are two sites linked to the Indian culture. One, high on a bluff overlooking the waters of Lake Hartwell, is believed to be an Indian burial mound site, and has long been referred to locally as “Indian Hill.” The second site, termed the “Arrowhead Factory,” lies within the Lake Issaqueena Recreation Area. Here, the Indians came to quarry rock and stone for use in making hand tools, stone axes and hatchets, and arrowheads. Numerous flint chips and stone shavings attest to the utilization of these rocks as a resource from which the Indians fashioned implements to serve their purposes in both war and peace.

Life was, for the most part, peaceful. However, with the arrival of the first European settlers in the early 1700’s, the page of history of the Native Americans was past, and another was beginning to be written.



**AN ACCURATE MAP OF NORTH AND SOUTH  
CAROLINA WITH THEIR INDIAN FRONTIER  
SHOWING IN A DISTINCT WAY - 1776**



**ORIGINAL MAP BY MOUZON**

*The most common trait of all primitive peoples is a reverence for the life-giving earth, and the native American shared this elemental ethic: the land was alive to his loving touch, and he, its son, was brother to all creatures.*

– Stewart Udall

## **Land and the Native Americans**

Indians viewed the land as bound to them through the role of natural systems. There was no such qualification as ownership – the land was theirs as the sun, moon and stars were theirs also. Stewart Udall attributes the Indian's love of the land to a depth of feeling, which is intangible, yet the "very essence of life." *"The land and the Indian were bound together by the ties of kinship and nature, rather than by an understanding of property ownership."* (Udall, 1963:17)

This concept is reflected nowhere better than in the Cherokee Nation. During the span of one generation, the Cherokees changed their way of life in order to become highly civilized. They built schools, and produced an alphabet; established mills and blacksmith shops; and, planned a constitution and legislature. Why? To prevent being shipped to the territories West of the Mississippi, and to be allowed to remain on the lands which were theirs, the life-giving mother earth of their fathers.

The relations of the white man and the Indian were seemingly destined for tragedy. The settlers swarming into the frontier of the South Carolina foothills represented settlers of the entire country in one aspect – property ownership. Land ownership was coveted, statuesque, and necessary. Neither Indian nor settler understood the concepts of the other. The Indian, wishing to live with the land, and the settler, wishing to own it, cultivate it and call it "mine," were players in a drama which was unfolding in the American Colonies of the 1700's. It was a drama which would dominate American history for approximately 150 years, and, in the majority of instances, end in heartbreak.

## Colonists and Civilization

*Granted that the frontier experience was only one of the many factors which shaped American history, it is certain nevertheless that the American psyche has been deeply imprinted by the frontier myth.*

*– Rene' Dubos*

History records that the first civilized white man to venture into the Southeastern United States was Hernando de Soto of Spain. de Soto first visited the country of the Cherokee in 1540, and recorded that “the people were living in pole houses of straight saplings covered with plaited mats of cane and other sticks.” (Hamel and Chiltoskey, 1975:18) The travels and explorations of de Soto during 1539-1542 provide the first knowledge of the geography and inhabitants of the region.

The frontier of South Carolina in the early 1700's was the Carolina upcountry. Traders were the first white men to reside in the land known as “Cherokee Country;” and, Eleazar Wiggin was perhaps the first noted trader in the region as his presence was recorded as early as 1711. (Malone, 1956:6) The trader on the frontier of the developing country was a rugged individual, often surrounded in myth and tall tales. Fur trade was the vital link between the Indian tribes and the newcomer, the white man. It functioned to maintain peaceful cooperation on behalf of both the Indian and the settlers. Yet, trade eventually was to be the key that unlocked the door of misunderstanding, and subsequently, war. For in strengthening ties between the two factions, trade also served to make the Indian dependent upon the English. The Cherokees recognized this growing



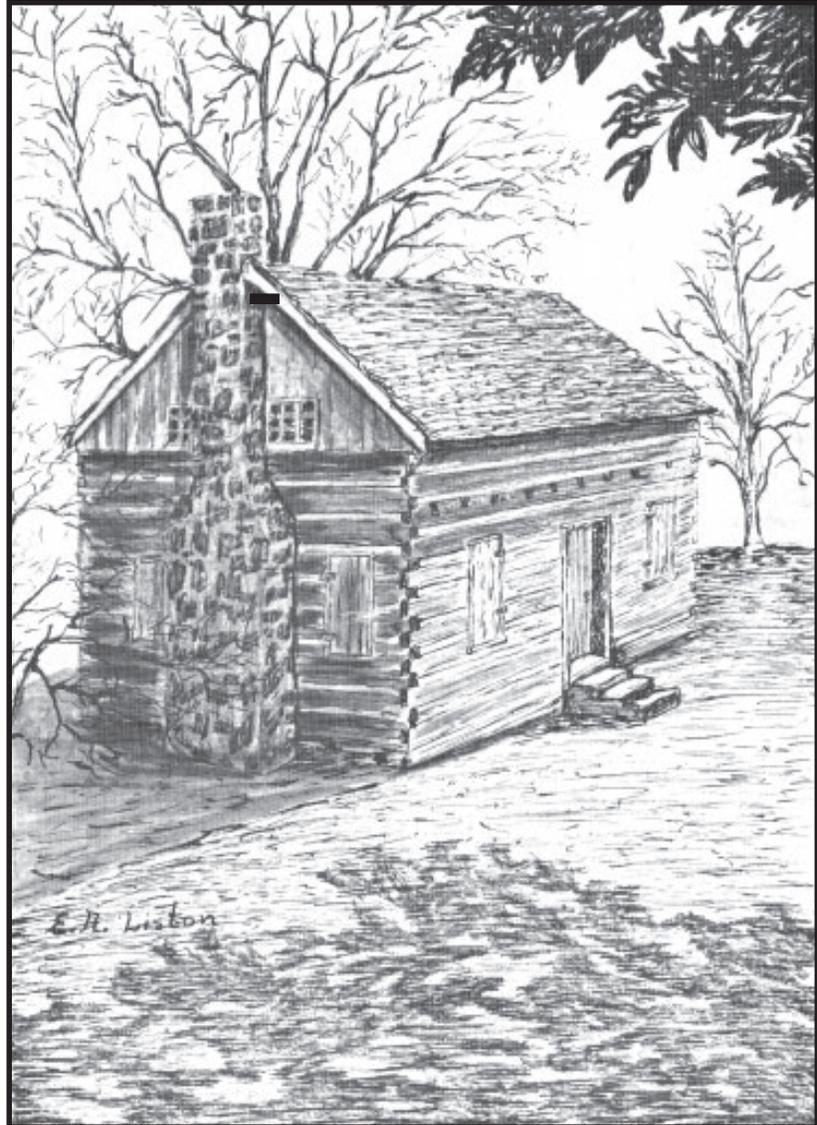
dependence and in 1730 sent their leaders to England to negotiate with King George I an alliance to maintain impartial trade relations, which ultimately maintained the peace for 30 years.

Trade was a lucrative enterprise in the region of the Clemson Experimental Forest. In 1741 alone, approximately 121,000 furs of varied species, including deer, beaver, fox, bear and wolf amongst the total count, were bartered. Not all the traders were honest, nor trustworthy. Frequent and numerous swindles between the Indian and the trader were to cause increased violence on the frontier, and eventually climax in bloodshed and war.

First settlers in the region were of Scotch-Irish descent from Pennsylvania, Maryland, Virginia and North Carolina. They sought to derive a livelihood from the wilderness of the frontier, and were often aided by the Indians, whom they found to be quite friendly.

A plain breed of people, these early colonists brought with them to the foothills an unwavering nature which sought to improve their European heritage. They constructed log cabins, plastering the insides with white clay, a technique they picked up from the Cherokee. This white clay, popularly known as “Cherokee Clay,” would in later years be the same material shipped to England for use in making the famous Wedgewood china. (Klosky, 1971:7)

These first settlers arrived by wagon train, enduring hazardous terrain and extreme hardships to begin a new life on the Carolina frontier. Aided by the industrious Indians, they made a start at carving out a new life on the foothill border. With time, however, the Indians and the colonists would be engaged in the inevitable conflict – the civilized versus the savage.



*I wish all to know that I do not propose to sell any part of my country, nor will I have the whites cutting our timber along the rivers, more especially the oak. I am particularly fond of the little groves of oak trees. I Love to look at them, because they endure the wintry storm and the summer's heat, and – not unlike ourselves – seem to flourish by them.*

– Tatanka Yotanka, or Sitting Bull

## **Conflict**

William Bartram in 1775 visited the town of Essennecca (Seneca Old Town) and observed that:

*The Cherokee town of Sinica is a very respectable settlement situated on the East bank of the Keowe River, though the greatest number of Indian habitations are on the opposite shore, where Likewise stands the council-house, in a level plain, betwixt the river and the range of Lofty hills, which rise magnificently, and seem to bend over to green plains and the river: but the chief's house, with those of the traders, and some Indian dwellings are seated on the ascent of the heights on the opposite shore. (van Doren, 1928:269)*

Shortly thereafter, in 1776, the town would be destroyed by Major Andrew Williamson. “Every house was burned to the ground, 5,000 bushels of corn was destroyed, the peach trees were cut down and the green corn with all the growing crops trampled in the earth. . .The conquest of the town was so complete that the Indians were driven into the woods never again to return to the town they built over three hundred years ago.” (Doyle, 1967:9)

What events had prompted the change in peaceful relations? Fear, on the part of the white man, or simple bloodthirsty savagism on the part of the Indian? One may perceive that the events which unfolded over a period of 30 to 40 years in the Cherokee Country of upper South Carolina during the mid-1700's were only a prelude to the numerous conflicts that would arise in the next 100 years as a fledgling nation extended its boundaries westward. What posed a threat or an obstacle in the push outward to newer horizons was simply crushed and destroyed. Therefore, the Cherokee Wars of the 1760's were a brief preface to a gigantic drama which was destined to unfold across the stage of mountain and prairie in the subsequent years, as the cry rang, “Westward, Ho!”.

Cherokee uprisings were a natural reflex action. Their lands, homes and way of life were being threatened and to strike back at the threatening agent was the only recourse they knew.

One more circumstance of extreme importance greatly affected the uprisings on the frontier – the American Revolution. The Cherokees, as most Indians, sought alliance with the British and Tories. By collaborating with the British, the Indian served to harass the homes of settlers and lead the men from the armies of the rebelling colonies back to defend their own families on the frontier. “No wonder was it that between battles they hurried home to see if their loved ones were still alive.” (Doyle, 1967:21)

Many treaties with the Cherokee preceded the unrest in 1776. The country was expanding, and boundary specifications in the Treaties of 1760, 1768, and 1770 were continually having to be revised.

Continued hostilities offered no recourse and in July, 1776, Major Andrew Williamson marshalled white settlers into a force to crush the rebelling Cherokees. Major Williamson invaded the village in the early hours of the morning of August 1, 1776, completely destroying it. In the process, those inhabitants that were still in the village were sent fleeing into the woods for shelter, never again to return to live at the village site. Among the militia of Major Williamson were Captain Andrew Pickens and Francis Salvador, who was mortally wounded in the ambush which greeted the invading force.

Events leading to the destruction of Essennecca, are intertwined with the operations of Alexander Cameron, deputy Indian commissioner in South Carolina. Cameron was a Tory and enlisted the Indians as agents to harass the supporters of the rebelling colonies. It was believed he was at Essennecca, but in reality, Cameron planned and sent the Cherokees, with Tories in the forces also, for the surprise attack which greeted Williamson’s men. Cameron, meanwhile, remained safely hidden elsewhere in the Cherokee Nation. (Badders, 1976:35)

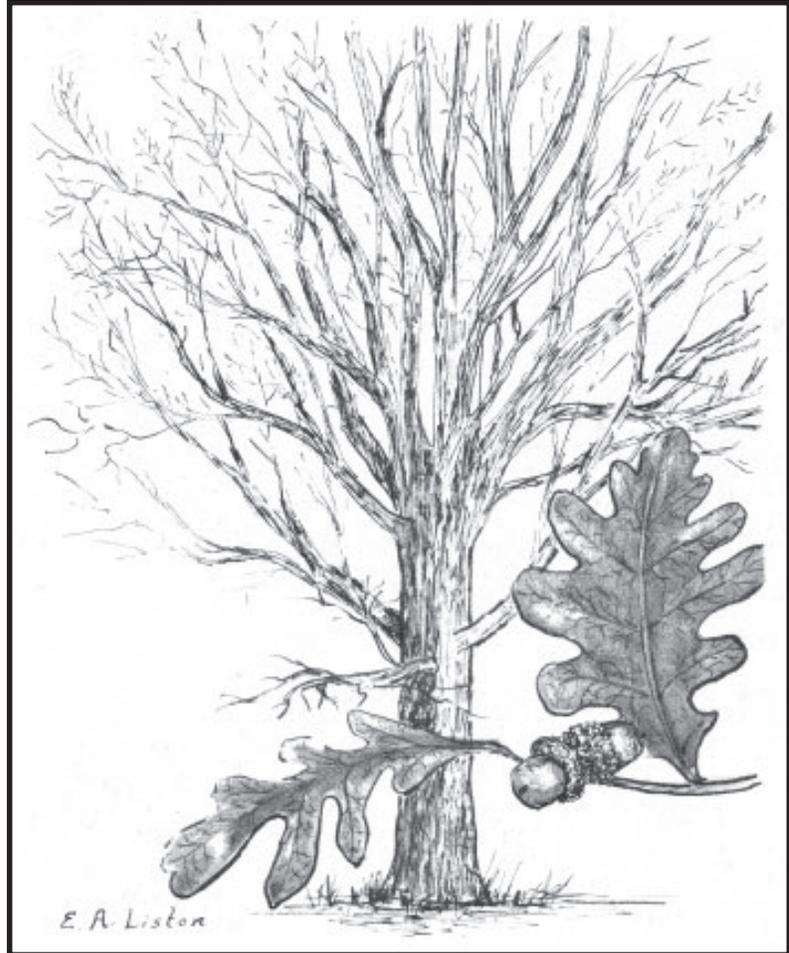
Following the destruction of Essennecca, several other villages of the Lowerhill Cherokees suffered the same fate. Names, which stir the imagination, Estatoe, Warachy, Toxaway, Tomassee were added to the increasing list of destroyed towns, as the once proud Cherokee Nation lay in ruins.

Williamson, having been promoted to Colonel, and his men utilized the newly constructed Fort Rutledge, located on a bluff above the site of the destroyed Essennecca on the Keowee, to enlist more forces and recover from the previous battles during the Fall, 1776. Fort Rutledge remained garrisoned and occupied until its destruction in 1780 by British troops. It had served as a reminder of the Cherokee Campaigns of 1776, and was deserving of a page in the history of the upcountry (Appendix A). In May, 1777, the Cherokees entered into a Treaty with South Carolina, ceding their lower settlement lands. The stage was set for development of the new lands, but settlement would be slow until after the Revolution.

Unrest still plagued the Carolina upcountry in the following years. Settlers sought claim to Cherokee lands and this further provoked the situation. Circumstances were leading the Cherokee and the settlers down a violent road, which would eventually be resolved in the vicinity of a great oak at Hopewell on the Keowee, home of Andrew Pickens.

*I have a pipe and a little tobacco to give to the Commissioners to smoke in friendship. I look upon you and the red people as my children. Your having determined on peace is very pleasing to me, for I have had much trouble during the late war. I am old but I hope to bear children who will grow up and people our nation, as we are now to be under the protection of Congress and shall have no more disturbance. The talk that I have given is from the young warriors in my town as well as myself. They rejoice that we have peace, and we hope that the chain of friendship will never be broken.*

– Nancy Ward  
Cherokee War-Woman



## Resolution

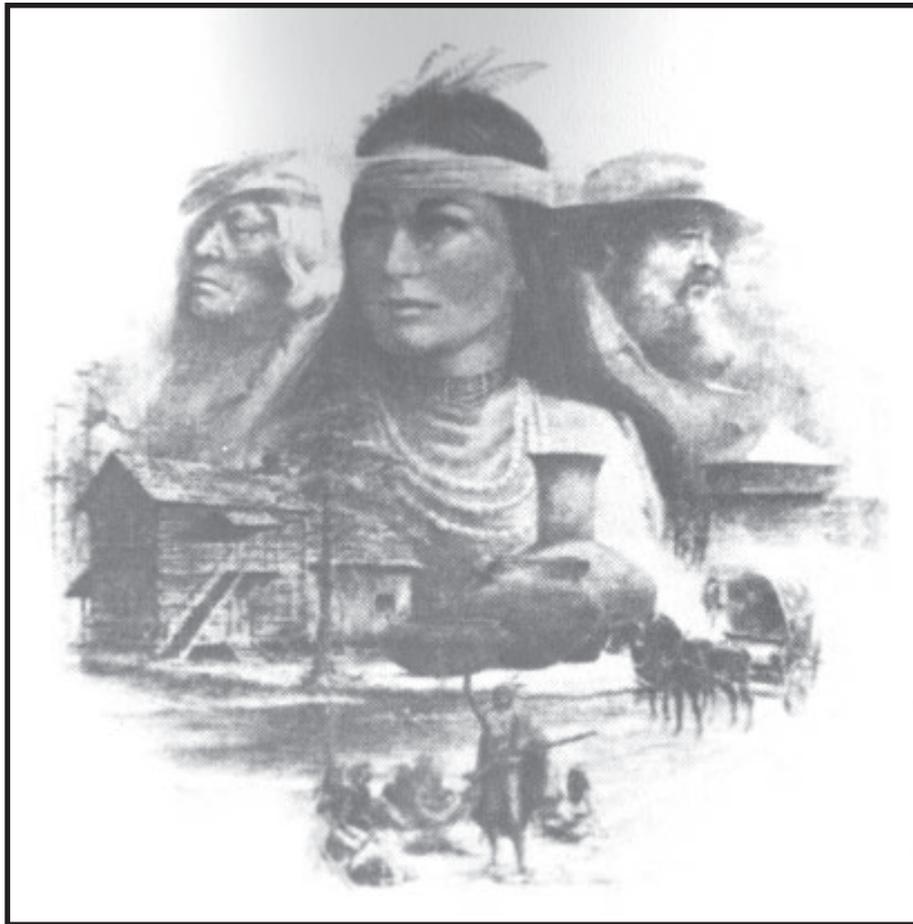
The words were eloquently spoken, the feelings sincere, and the orator was the Beloved or War Woman of Chota, Nancy Ward. The occasion of her speech was the Treaty of Hopewell, finalized on November 28, 1785, culminating a ten day council of peace between the Cherokee Nation and the new United States Government.

Hopewell, on the Keowee, home of General Andrew Pickens, was the setting of the Treaty. Located on an interval tract of low-lying bottomlands, which was in full view of the front of the Pickens' home, stood the mighty oak under which the negotiations were conducted. Present historians may only speculate as to the precise species of oak which witnessed the historical event. Conflicting reports lead one to assume it may have been a great white, or a long-lived red, or even perhaps a water oak, known to thrive in the low-lying areas of the river valley. The type of tree is unimportant. What is important is what happened in the vicinity of its spreading branches. For in sight of this autumnal oak, respectfully titled, "Treaty Oak," a new destiny for the Cherokee Nation was written.

What do we know of the Cherokees who journeyed to Hopewell during the Fall days of November, 1785? They were ably led by the peaceful and philosophizing Old Tassel or Corn Tassel, who had assumed responsibility for the Cherokee Nation following the death of

Attakullakulla in 1780 and Oconostata in 1782. Old Tassel was disturbed by the settlers' greed for land and was to remark to Governor Randolph of Tennessee in 1787, "*Truth is, if we had no lands, we should have fewer enemies.*" (Williams, 1944:267) Eager to voice his grievances with "the Great men of the thirteen states," Old Tassel led 36 chiefs and 918 of his people, men, women, and children to General Pickens' home, and camped along the Keowee.

Among his people was Nancy Ward, War Woman of Chota. The "War Women" were powerful in the Cherokee Nation and were given the responsibility of allotting punishment to captives. Nancy



Ward was exceptionally influential. As the sister of Attakullakulla of the upper Cherokees, her wisdom in the tribe was sought and respected.

They began to gather that Fall on November 18, and by November 22, had assembled and negotiations were begun. A great bower of pine boughs had been constructed and plans for the Treaty were started within the rough walls of this hastily constructed shelter.

Representing the United States Government in its first treaty with the Cherokee were four Commissioners: Benjamin Hawkins, Andrew Pickens, Joseph Martin and Lachlan McIntosh. Hawkins was the acting chairman of the Commission and handled the records of the conference and all communications. (Pound, 1957:46)

It was autumn along the Keowee, and the hardwoods had shed their leaves which scattered on the forest floor. The land was preparing for winter and wore a cloak of chill anticipation of the days to come. Woodsmoke drifted lazily, rising from the Cherokees' encampment, and the children scampered and frolicked as only children can in the days of youthful innocence. Their future rested in the negotiations near the great oak, and the future of their children, and their children's children.

The heart of the peace negotiations was the land. Having explained the newly vested authority of the United States, the Commissioners were treated to Old Tassel's reverence for the earth, the land of his fathers:

*The land we are now on is the land we were fighting for in the late war. The Great Man above made it for us to subsist upon. The red men are the aborigines on this country. It is but a few years since the white men found it. I am of the first stock, a native of this Land. (Brown, 1934:248)*

The Indians loved ceremony and the negotiations continued for several days. Several exchanges between the Commissioners and Old Tassel took place before the Treaty was signed, and Nancy Ward eloquently expressed her thoughts as well as those of her people.

Following the Treaty of Hopewell, Chiefs and Commissioners departed Hopewell with thoughts of a lasting peace. However, the Treaty pleased no one. (Brown, 1938:250) (Appendix B) Yet, it represented a humble beginning. Two other treaties were negotiated at the site of "Treaty Oak," one with the Choctaw Nation, the other with the Chickasaws, both occurring shortly after the Cherokees' departure. Today, some individuals speculate that the "Treaty Oak" lies under the waters of Lake Hartwell, created through the damming of the Seneca River. However, its memory does not lie beneath the waters of a man-made reservoir, if indeed, the "Treaty Oak" was inundated. On a bluff rising above Lake Hartwell, is a monument dedicated to the significant events of the "Treaty Oak." Contained within the Clemson Experimental Forest, this historic tribute is a lasting eulogy to an outstanding part of not only South Carolinian, but American heritage.

## 1785 – 1934      *Exploitation*

Circumstances which surround facts are the elements that interrelate to create history. Consider the years spanning the settlement of the upper South Carolina foothills. One can state that following the Hopewell Treaties of 1785, hostile Indian territory was opened to the onrush of colonizing pioneers, striving to build a home from the raw materials of the wilderness. Yet, who were these industrious settlers? What had prompted them to leave their previous homes and venture into unknown territory that had shortly before been the home of the Indian? What did they carry to aid them in their task of taming the frontier?

One can never return to the years 1785 – 1934. However, the era that grew and flourished in those years can be depicted. The names may be famous, or unknown. The places, lost in the speed of the present, linger only in the minds of those who were there, or those who have managed to memorize the stories passed down through generations.

Reality tells us that these people and their places once existed, and in many cases still do. It is our responsibility to realize that the events, however small or commonplace, belong in the story of man, the land, and the Clemson Experimental Forest, "*In the Face of Change.*" To slight these events is to slight all history. In turning our backs on the past, we turn our backs on the present, and subsequently dash all hopes of a promising future.

*Looking only a few years through the vista of  
futuraity what a sublime spectacle presents itself!  
Wilderness, once the chosen residence of solitude  
and savageness, converted into populous cities,  
smiling villages, beautiful farms and plantations.*

*– Chilicothe (Ohio)  
Supporter, 1817*

## Settlement

Following the Hopewell Treaties of 1785, the foothills of South Carolina ceased to be the home of the Native American. Instead, the region surrendered to enterprising settlers, eager to claim rights to the territories once the dominion of their red brother. Many of the pioneers were veterans of the American Revolution, seeking claim to lands in the area of the village of Pendleton.

Benjamin Lawrence was among these veterans. Lawrence served with the Anderson Mounted Militia during the Revolution as a Lieutenant. He was noted for his expertise as a scout for General Andrew Pickens, and following the War, settled in the area. He is buried on lands of the Clemson Experimental Forest, atop a small wooded rise.

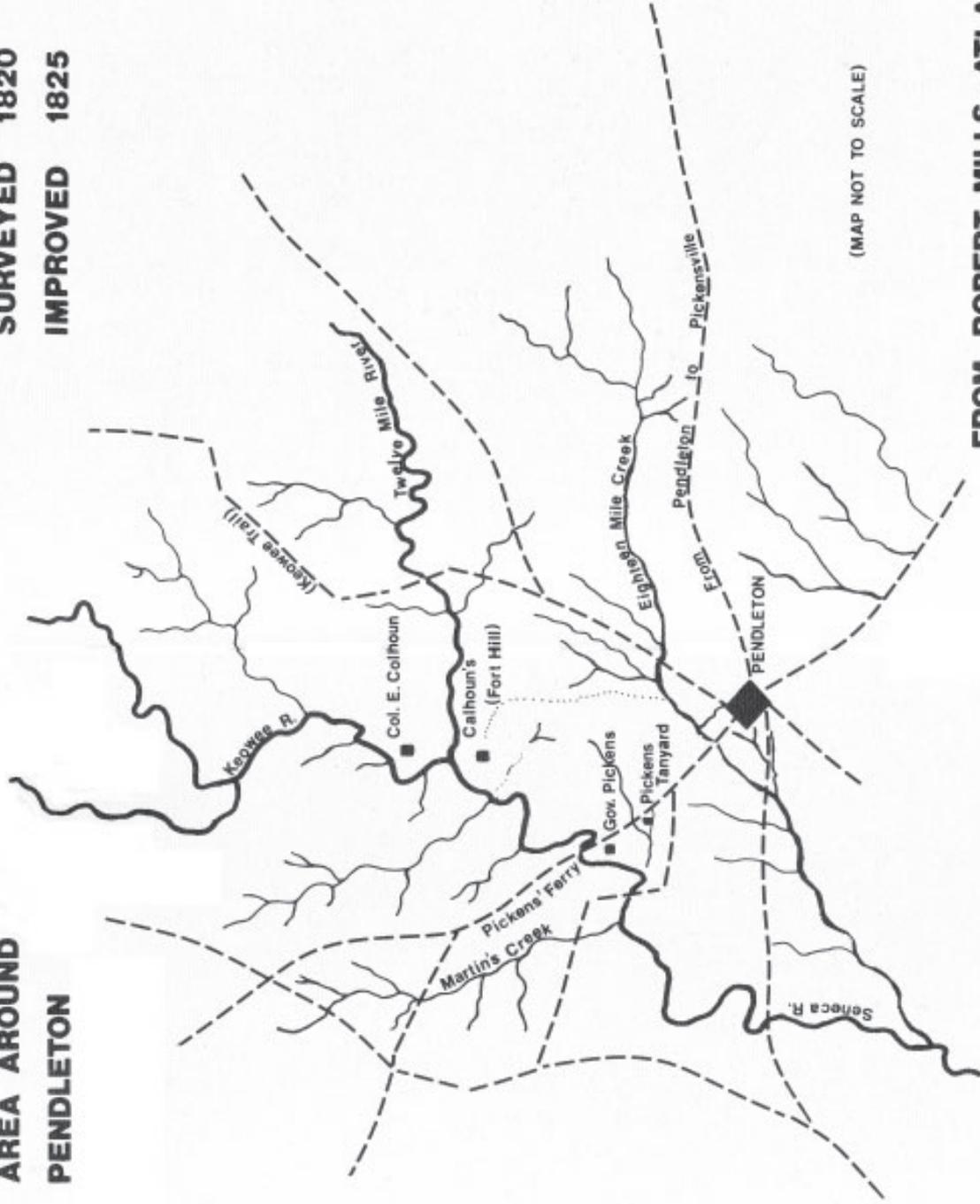
Pendleton County, established in 1789, encompassed the present counties of Oconee, Pickens, and Anderson. Population expanded greatly during the post war era in the Pendleton region. The village itself lay near the old Cherokee Path, serving as a wagon road to bring in new settlers. These settlers were a hardy breed, who wielded axes in the forest, clearing the land for crops and acquiring the necessary materials to build sturdy log homes.

Crops stretched into the foothills, as corn, wheat, oats, and rye waved in the breezes of the summer months. Orchards of apple, peach, and pear trees appeared on the cleared rolling hills and pasture scenes were common. These were pioneers of simple means who derived their



**AREA AROUND  
PENDLETON**

**SURVEYED 1820  
IMPROVED 1825**



(MAP NOT TO SCALE)

**FROM ROBERT MILLS - ATLAS**

existence from the land. These hearty souls were only writing history, but living it. Homespun was their clothing, and hard work their means of survival.

Streams were dotted with grist mills, water wheels spinning, on the vine-covered banks. It was a scene of pastoral imagery which Thomas Jefferson would acclaim. Jefferson believed that rural prosperity was the most pleasing scenery to the eye and stated that “whenever there are in any country uncultivated lands and unemployed poor, it is clear that the laws of property have been so far extended as to violate natural rights...The small landholders are the most precious part of the state.” (Shepard, 1967:137)

The flora and wildlife species of the region attracted many noteworthy naturalists in the latter eighteenth century. William Bartram in 1775 had surveyed the region and remarked:

*Now at once the mounts divides and disclose to view the ample Oconnee vale, encircled by a wreath of uniform hills; their swelling bases clad in cheerful verdure, over which, issuing from between the mountains, plays along a glittering river, meandering through the meadows. (van Doren, 1928:273)*

Andre' Michaux' followed Bartram a few years later in 1788. Michaux' was on a mission for the French Government and was seeking plants of economic usefulness. He discovered the rare Oconee Bells and recorded a list of many of the plant species of the foothills. Michaux' painted a vivid picture of the area during his travels:

*In the upper country the mass of the forests is chiefly composed of oaks, walnuts, maples, plaqueruiniers, and tulip-trees; the chestnuts, which rise to height of eighty feet, do not begin to appear in these states till within sixty miles of the mountains. (Michaux', 1805:333)*

The inhabitants of the region he paralleled with those of neighboring Tennessee and Kentucky, further specifying “they live in log-houses, insulated in the woods, which remain open both night and day...” (Michaux; 1805:339)



Not all of the original settlers of the area were unknowns. Among the first to acquire lands and build homes were General Andrew Pickens and General Robert Anderson. Pickens and Anderson fought together in the Revolution and both were to be instrumental in providing leadership to the young and growing community. However, Pickens' story is more relevant to the history of the Forest and the surrounding region.

General Andrew Pickens in July, 1784, had purchased a tract of land near the site of the battle of Essennecca (1776). The deed was for "593 acres more or less bounded on W. by Keowee River and all sides by vacant lands. Consideration: 57 pounds, 6 shillings." (Historical Commission, Indent 60: Book K) Pickens loved the frontier and the purchase of these lands bordering on the Cherokee Country was the last spirit of wildness in South Carolina. On a bluff overlooking the Keowee, Pickens built a frontier plantation home in 1785 and named it, Hopewell, after his church in the Long Canes community. Here in the Fall, 1785, the Hopewell Treaties were negotiated in the lowlands in front of Pickens' home.

Andrew Pickens was a native of Pennsylvania, having moved to South Carolina with his family by wagon train in 1756. Instrumental in both the Cherokee Campaign of 1776 and the American Revolution, Pickens was a respected member of the youthful society emerging in the region. He settled into agricultural pursuits and raised large herds of cattle and horses, often sending cattle drives to Philadelphia.

Land was his main wealth, as he owned some 6,000 acres and he was not above "swapping 100 acres for a good brood mare." (Klosky, 1971:18) Andrew Pickens served his state and his country well and in 1805 moved to his mountain home, Tomassee, leaving Hopewell to his sons, Ezekiel and Andrew, Jr. Andrew Pickens, Jr. lived in the family home and it was he that Edward Hooker visited in September, 1806.

*They live in the old family mansion – the general his father having removed to a farm at the foot of the mountains 15 or 20 miles distant. The house stands on a high and prominent bank of the river Seneca, which after coming boldly up to the foot of the hill at the end of the house, turns suddenly back, and then circuiting round about half a mile in front of the house forms a large and beautiful tract of fertile low grounds in full view ... The house is two stories high – has an oldish appearance – furniture decent not elegant... (Diary of Edward Hooker, 1896:901-902)*

Hooker was given a tour of the Hopewell plantation, and in riding the grounds with Andrew Pickens, Jr. was amazed at the low grounds in which there was "a beautiful meadow of red grass and white clover...the only meadows I have seen in South Carolina." Of Andrew Pickens, Jr., Hooker remarked that "he is much like a New England farmer in having a large barn filled with hay and grain – in working oxen, in cultivating apple-trees..." (Diary of Edward Hooker, 1896:902)

Hopewell was a unique home among the settlers and early pioneers of the Pendleton region. During the years following the Hopewell Treaties of 1785, Hopewell and its occupants would play a vital role in the expansion of the foothills' settlements. Presently, the Hopewell house and property is owned by Clemson University. It has remained in a good state of preservation, a signal landmark during the age of settlement of the late 1700's and the early 1800's; more importantly a reminder of the events that occurred within its grounds.



## Age of Expansion

*The land is the Garden of Eden before them,  
and behind them a desolate wilderness.*

– Joel 2:3

The immediate growth of the region led to the formation of churches by early settlers. Many “community” churches existed in those days, which have long since vanished. All that remains as evidence of these scattered churches are old family graveyards, such as the Ramsey and Davis family cemeteries, both of which are located on Clemson Experimental Forest lands.



Old Stone Church is the more noted church of the area, having been constructed around 1800. Conflicts arise as to its exact completion date. Although Old Stone Church does not lie within the Forest, it is significant in the history of the immediate region; the cemetery of Old Stone Church contains the remains of several of the first settlers of the area. (Appendix C)

Another result of increasing development was the formation in 1815 of the Pendleton Farmers Society. This dignified society of men included some of the most brilliant individuals in the State. Low-country personages such as Thomas Pinckney, Jr. and Benjamin Smith joined with the noted men of the upcountry, among these Andrew Pickens, Jr., John E. Colhoun, Jr., and Robert Anderson, Jr. The purpose of the Farmers Society was to increase the productivity of agriculture and serve as a catalyst for increasing the trade to the region.

Colonel John E. Colhoun, the site of whose summer home is located in the Forest, was among the charter members of the Society. He is credited with contributing twenty-one pamphlets on silkworms and the manufacture of silk to the Society in 1829. However, the hopes of producing an immense fortune from silkworms did not materialize, and the project was soon abandoned.

With the sudden growth of the upcountry region in the early nineteenth century, there arose a need for a transportation system to carry not only freight, but passengers. Stagecoach and tavern days of the 1800's in upper South Carolina are not entirely synonymous with the same days in the expansion of the American West. Western stagecoach days are often cast in a romantic light, complete with dangers lurking behind every bend in the road and a hero not far away. However, it is really a different story, and is not quite as thrilling as television has led one to believe.

In the Pendleton region, a network of stage lines developed around 1800, following the original Indian paths. These Indian paths had been heavily utilized as wagon roads, and cowdrivers often followed them on their way to market. Early stage lines were rough, and not quite conducive to pleasant travel. Charles Dickens once described a stagecoach trip as follows:

*A great portion of the way was over what is called a corduroy road which is made by throwing trunks of trees into a marsh, and leaving them to settle there. The very slightest of the jolts with which the ponderous carriage fell from log to log, was enough, it seemed, to have dislocated all the bones in the human body...Never, never once that day, was the coach in any position, attitude or motion to which we are accustomed! (Sloane, 1955:57)*

Within the Clemson Experimental Forest, one can still faintly see traces of the old stage road that was the Keowee Trail in the early to mid-1800's. This stage line connected Pendleton with Old Pickens, and then merged with a road from McKeeny's Ford to Oconee Station. Oconee Station, lying outside the Forest boundaries in Oconee County is rich in the human and natural history of the immediate area, having served as a trading post, stagecoach stop, and an early frontier fort during the years since its construction in 1760. (Appendix D)

Travel on the early stagecoaches bordered on torture. Inside the coach was space enough for six passengers; one more hearty soul could "hazard" the journey on the seat beside the driver. At the rear of the coach, luggage was stowed for the journey, and the mail bag rode at the driver's feet. Roads were littered with old tree stumps, creating a jolting ride and passengers were often required to walk up the steeper and longer hills of the region and give the horses added assistance. Rain increased the miseries of stage travel as the coach wheels mired in mud axle deep.



Winter travel compounded misery. One story tells of an aged driver on the trip from Abbeville to Anderson who was found frozen to death upon his arrival in the village. However, he was still erect in the seat with the reins firmly clasped in his hands. Thereafter, that day in 1832 was designated "Cold Saturday."

Stage fare was cheap. In fact, the cost per mile was only ten cents, and one could stand the misery and the jolts, for the low cost of stage travel served to increase the benefits. Among the “benefits” of stage roads were the numerous taverns.

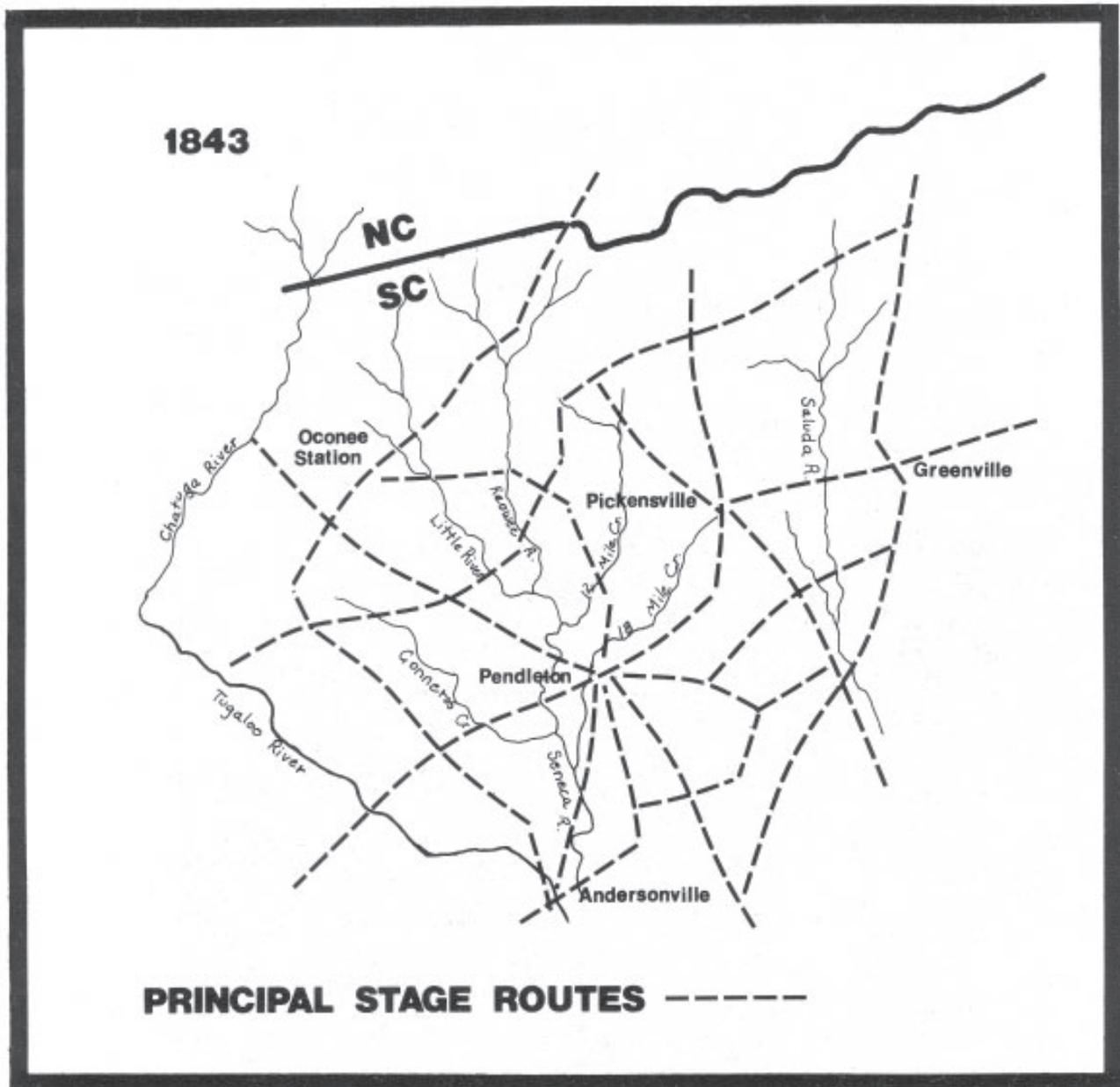
Taverns served as stagecoach stops and were randomly scattered along the roads. One such old tavern bordering on the Forest boundaries is the ancestral home of Mr. L.A. Pike. The present driveway of the house is part of the old stage road to Old Pickens. Originally the home had fourteen rooms; however, seven rooms of the house were sold by Mr. Pike’s grandmother, and the remaining seven are the testimony to the house’s tavern and stagecoach days.



Some of the individuals who traveled the stage lines were oblivious to the miseries of the journey due to the scenery along the roads. G.W. Featherstonhaugh, an Englishman, traveled through the Pendleton District of South Carolina in August, 1837, recording portions of his travels in a journal. Regarding the foothill region he wrote:

*This loveliness of the mountain scenery in the Southern States is almost unknown in other parts of the United States. Indeed in what country can more attractions combine to gratify the travels than where the last energies of an aboriginal race, the most beautiful varieties of the mineral kingdom, and the most obliging hospitalities instruct and gratify him whilst he is wandering amongst the rarest and most beautiful of nature’s scenes. He further stated: I now mounted and rode about fifteen miles through a pleasant country, entirely unsettled, all hill and dale, with occasional pellucid streams. The road was literally strewn with semitransparent quartz and crystallized hornblends...Passing the house of Mr. John Ewing Colhoun, perched on a hill (Keowee), where I paid a visit last year, I at length reached Fort Hill, where Mr. Calhoun and his family received me in the most friendly manner. (Featherstonhaugh, 1970:266-267)*

Stage lines served a useful dual purpose during the 1800’s. In tying the former frontier to the low-country of South Carolina, avenues of communication were opened and trade flourished.



Secondly, coaches transported not only passengers and freight, but mail. Often the stage roads were referred to as “post roads” because the United States mail was carried over them.

The first American mailboxes of those days are a tribute to the ingenuity of the people. It was the custom to put one’s boot out for personal messages, and some of the first “mailboxes” on rural routes were no more than an old boot nailed to a post. (Sloane, 1955:62)

The region was growing rapidly as people migrated to the foothills during the summer months to escape the plagues of mosquitos and stifling heat of the low-country and coastal areas. This influx ushered in a new period, the Plantation Era, a time of pleasurable living for the people, and the beginnings of overuse of the land.

## The Plantation Era

*Where Reed upon her margin sees  
Sweet Woodburn's cottages and trees.*

– Walter Scott

The names of the homes and plantations in the early to mid-nineteenth century on and around the Clemson Experimental Forest evoke a story of grandeur. Such imaginative names as The Oaks, Valley View, Ashtabula, 'Possum Corner, Fort Hill and San Salvador reflect the period of history in which these homes flourished. San Salvador was built by Major Samuel Taylor and stood on a bluff directly across the Keowee from the site of the Cherokee town, Essennecca. The name signifies its origins as it was titled in honor of Captain Francis Salvador who was killed in the ambush at Essennecca in August, 1776.



These homes were strikingly elegant and beautiful. Much has been written about their owners and the life styles which were led during this period of history. Two of the plantation homes of this era, Keowee Heights and Woodburn, are significant in the history of the Forest.

Keowee Heights was built by John Ewing Colhoun originally as a summer home in the 1790's. The site of the plantation was on a high hill between the Keowee and

Twelve Mile Rivers. John E. Colhoun, educated as a lawyer in Virginia, had moved to Charleston to conduct his practice. He was a cousin of the later-to-be distinguished statesman, John C. Calhoun. John E. Colhoun spelled his name with an "o," and his family followed this tradition; whereas, John C. Calhoun and his family adopted the spelling with an "a." Colhoun served in the South Carolina House of Representatives from 1778-1800, the State Senate, and in 1800 was elected as a Republican to the United States Senate. Unfortunately, he was unable to serve his entire term as he died in October, 1802, leaving his widow, Flouride Bonneau Colhoun, with three young children.

A highly respected individual, a letter from John C. Calhoun to Andrew Pickens, Jr. on the 21st of January, 1803 reflected the following insights into the integrity of a great statesman.

*Let me now turn from these things to one of a more serious nature, I mean the death of our honoured relation John E. Colhoun. By his death our country has lost one of its most sincere friends; and our family one of its brightest ornaments. Mr. Colhoun by his spirited behaviour in the last congress gained himself much honour in N. England. Indeed the general tenour of his actions, al(t)hough not exhibited upon so elevated a stage as congress, yet have been such as to claim the gratitude of his country. It is probable, dear Andrew, that we shall follow the same presuits of life that he did, let us therefore be ambitious to emulate his virtues and knowledge. (Meriwether, 1959:8-9)*

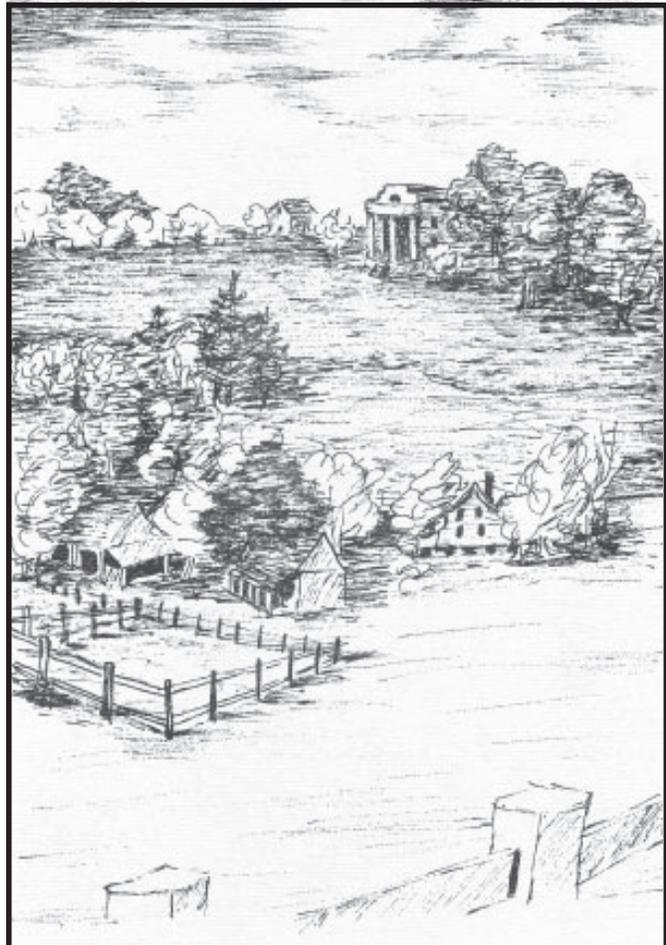
Keowee Heights later became the residence of John E. Colhoun's son, Colonel John E. Colhoun. Colonel Colhoun, a Yale graduate, had served in the United States Navy. His sister, Floride, married John C. Calhoun.

It was during the residence of Colonel Colhoun that Keowee attained its highest period of affluence. In springtime, when the dogwoods were in full bloom, the white frame house with its stately columns, was a picture book of enchantment. It was easily the most extensive and refined plantation home in the area.

An excerpt from the diary of Clarissa Adger, visiting relatives at Woodburn Plantation in 1854, reveals: "We also went to John E.'s place, Keowee (home of John Ewing Colhoun, brother of Mrs. John C. Calhoun). It is most beautiful. The house is on the summit of a high hill and the grounds are in fine order. It is said to be worth \$30,000." (Stevenson, 1973:71-72)

As a charter member of the Pendleton Farmers Society, Colonel Colhoun was a planter, an able financier and served at one time as the state treasurer. Reportedly, the Negroes who worked the elaborate plantation told stories of Colhoun's wealth, asserting "that Colhoun was so rich he shod his horses with silver horseshoes." (Klosky, 1971:53)

Martha Calhoun, Colonel Colhoun's daughter, was nicknamed "Cuddie" and was reknown for her skills as an equestrian, musician, and



conversationalist. Colonel James T. Bacon in his recollections of “Early Green Springs,” a summer resort popular with the Colhouns and Calhouns said of “Miss Cuddie”: “She was an enthusiastic, fearless, inimitable horse woman – the lightest and airiest of waltzers – she played beautifully on the piano!” (Stevenson, 1973:17)

People loved to congregate to hear her play the piano, watch her ride, or marvel at her agility on the dance floor. As a composer, her *Keowee Waltzes* were each given a local Indian name – Jocassee, Cherokee, Seneca. An individual, Dave Sloan, recalled her marvelous skill with horses: “I once saw her mount a young blooded horse of her father’s that two young Negroes with difficulty held whilst she was being seated, and when turned loose, skillfully managed him.” (Sloan, 1891:77)



Dave Sloan was the best friend of William Lowndes Calhoun, the youngest son of John C. Calhoun. He spent a great deal of time with the Calhouns and paints a revealing picture of life in the mid-1800’s with the Calhouns and their cousins of Keowee Heights, the Colhouns.

The remains of Keowee Heights are contained within the present Clemson Experimental Forest.

Woodburn was the home of Charles Cotesworth Pinckney, son of Thomas Pinckney, once Governor of South Carolina. Pinckney built Woodburn in the early 1800’s, and its architecture and style reflect the high Southern life which ended with the Civil War.

The house itself is a large, four-story, wooden structure with wide porches, pillars and double French doors on the front two porches. Slave labor worked the 600 acres of farmland surrounding Woodburn when Pinckney owned the plantation. Reverend Dr. John Adger told of his trip to Pendleton and his fascination with the “desireable farm” of Woodburn and revealed:

*I fell in love with Woodburn at first sight – the beautiful ride through its woods up to the house, the fine old dwelling itself, the splendid mountain view seen through its windows, the beautiful road down to the stable, running over a ridge, with trees filling a hollow on the left side, and on the right a romantic forest ravine. And, then, beyond the stable the fertile acres of bottom land... Woodburn had hold of my heart. (Stevenson, 1973: 47)*

Adger purchased Woodburn for his family in 1852. Woodburn, indeed, had hold of his heart.

Woodburn is on land that was once part of the original land project of the present Clemson Experimental Forest; it has since been donated to the Foundation for Historic Restoration in Pendleton.

What became of these elaborate cultural centers, peaks of Southern society? The Civil War ended the way of life for many; others simply passed into the hands of individuals who either preserved them or let them deteriorate into ruin.

Keowee Heights eventually became the property of the O.M. Doyle family. However, the house was burned in an unfortunate fire, and the property was bought for the Clemson-Land Use Project during the 1930's. Nothing remains as evidence of the most elegant plantation in the region but wandering periwinkle, several old handmade bricks from the fireplace foundations, and the family graveyard on a nearby hill.

The Colhoun Cemetery, seriously neglected and heavily vandalized prior to being acquired by the University, contains the graves of Senator John E. Colhoun, his wife, and other immediate family members. Surrounding the grave sites is a rectangular wall of native stone, quaint in the quiet forest setting.

Today, one may stand on the site and gaze at the waters of Lake Hartwell, which inundated the plantation bottomlands along the Keowee. It is easy to question the plantation's existence, its vastness, and day-to-day operation. However, the inherent values that are Keowee Heights lie with the land, and realizing this fact, a certain unspoken wonder is lent to Keowee and the people who lived and died with the plantation, its life, and its culture.

Woodburn fared better than Keowee. Neglected for many years, it was placed on the National Register of Historic Places in 1971 and received a grant in 1972 from the Department of Housing and Urban Development for restoration. It had won the hearts of individuals who were determined to save it from further deterioration in the early 1970's, just as it had captured the heart and vision of Dr. Adger in 1852.



The era of Keowee Heights and Woodburn plantations was a time of gracious living. However, it was also an age of advances in technology and agriculture, serving in the further advancement of society toward the "golden age".

## Technology and Advancement

*It was all prices to them: they never looked at it:  
why should they look at the land? they were Empire  
Builders: it was all in the bid and the asked and the  
ink on their books...*

*– Archibald MacLeish*

The “golden age” dawned in the Carolina foothills with intensive agriculture. Lands were cleared for a variety of crops which included corn, oats, wheat, tobacco, and cotton. Plantations flourished, and the village of Pendleton was transformed from a homespun, pioneer atmosphere into a lavish society. The Farmers Society contributed to improving the agriculture of the region and also served to bring in trade and manufacturing.

Within the vast network of dirt roads and stage lines which crisscrossed the region, were the hard-working individuals who were deriving a living with and from the land and its natural resources. An excellent example of individuals who worked with land’s resources were the owners and operators of the numerous grist or corn mills in the region. There is a story of harnessing a natural energy force, in the form of swift-flowing water, to produce commodities such as flour and meal. Mills were a common sight within the area. With their huge water wheels turning furiously, they were a symbol of early America which has passed with very little notice.

Both Todds and Twelve Mile Creeks served as mill sites in the 1800’s. The remains of the foundations of the mill at Todds Creek can still be faintly seen. This mill, in itself a story of natural resource utilization during a past culture, is presently preserved and located on the Horticultural Gardens of Clemson University.



Little manufacturing centers thrived in the region. Often located in these early pioneer manufacturing markets were sawmills, grist mills, wagonmakers and distilleries. With the introduction of cotton in the early 1800's, these centers added a new feature: cotton presses, gins, and textile mills. Cotton prospered during the late 1800's particularly following the Civil War.



One center of note was located on a stream which was locally referred to as Mill Creek. Mr. L.A. Pike describes the complex:

*It consisted of three buildings. One was called the rock building because it had three stories and the lower two were of native stone, just like Old Stone Church. The wooden part was of fine lumber, sawed just up the creek at the local sawmill. The sills were 30 inches wide and one and a half feet thick, made out of pure heart pine. This rock building, to my recollection, was the first yarn mill in the upper part of the state. It made coarse thread for good cotton clothes.*

*Connected to the rock building was another building in which there was a cotton press, a type of cotton gin, which compressed the cotton. These two buildings were approximately 60 feet wide and 100 feet long. Attached to the rock building on the other side was a corn mill which was run by water. The water wheel on the mill was 60 feet high. All these buildings were joined by wooden walkways made out of planks with little shelter roofs over them. These buildings were constructed sometime in the 1830's, and went out of business around the turn of the century. The Holcombes bought the place and turned it into a tanyard for a number of years.*

*There was a forest fire down here in the 1930's, and the wooden parts of the buildings burned real fast. There weren't nothing no one could do, and it sure burned some real fine lumber. Textiles haven't changed but a very little since then, just been modernized... (Pike, 1977)*

Modernization introduced new innovative machinery and bred out the old in the foothills during the turn of the century. However, some enterprising individuals still looked for the “get-rich-quick” concept and searched for gold and other minerals in the region. There is evidence of the early trials at gold and mica mining on present Forest land. Search and exploration yielded little and the mining projects were abandoned. Perhaps, somewhere within the rolling hills there does lie a rich vein of precious metal, but speculation rarely reaps rewards.



On towards the turn of the century the region prospered and thrived, principally through farming, additionally supplemented with manufacturing enterprises. The first railroads had been “built with picks and mattox, and the rails laid by hand” through the area. Stagecoaches were scarce after the arrival of the railroad, and eventually they too succumbed to the advance of technology.

Prior to 1900, an event of extreme significance occurred. Efforts to establish an educational institution during the 1860’s had failed due to the economic situation of the South following; the close of the Civil War. This dream of a scientific college materialized with the death of Thomas G. Clemson. In Clemson’s will, he bequeathed Fort Hill Plantation, former home of John C. Calhoun which he had inherited, and \$80,000 to South Carolina for the purpose of establishing a college. In 1893, Clemson College officially opened its doors.

Under the broad mandate of the Morrill Act, which had been strongly supported by Thomas G. Clemson while he was living, the guidelines that would later serve in the establishment and operation of the Clemson Experimental Forest were contained.

With the century mark approaching, the lands of the region continued to be cleared, abandoned, and overused. Slowly, the life line was being cut, but it would not be completely severed until the 1930’s. What lay between still haunts the minds of many.

## Deterioration/Degradation

*The ravages committed by man subvert the relations and destroy the balance which nature had established...; and she avenges herself upon the intruder by letting loose her destructive energies... When the forest is gone, the great reservoir of moisture stored up in its vegetable mould is evaporated... The well-wooded and humid hills are turned to ridges of dry rock,... and... the whole earth, unless rescued by human art from the physical degradation to which it tends, becomes an assemblage of bald mountains, of barren, turfless hills, and of swampy and malarious plains.*

– George Perkins Marsh

During the succeeding generations since the Cherokee lived with the earth, and William Bartram's "majestic forests" fell to the swing of the axe, the land endured. It withstood the bloodshed of Cherokee Wars, the initial settlement and forest clearings, and the sweep of plantations which were a tribute to a fading form of civilization.

However, during the years spanning 1860 - 1930, the land suffered. Widespread was the clearing of gently rolling hillsides to increase farmland acreage. It was these years in which the most



intensive agricultural use of the lands occurred. Scientific land management was but a dream, and farmers did not practice land rotation, contour plowing, or fertilization, all of which would allow the lands to rejuvenate and recover.

Land, it seemed, was expendable. It was cheap and inexhaustible to the

farmers. When the land produced a poor crop, the solution was simple – buy more land, then clear it, farm it, and discard it when it too, was worn-out. As Mr. L.A. Pike has bluntly stated, "People had to make a living; farming was the only life they knew. These hills should never have been cleared." (Pike, 1977)

Unfortunately, these hills were cleared and farmed. Cotton was the principal crop at first, and then was succeeded by corn between 1909 - 1930. Soil erosion was the result of these hillside clearings, and it was widespread, rampant, and seemingly unstoppable. George Perkins Marsh, naturalist and author of the classic, *Man and Nature*, had foreseen during the 1860's the calamity which would eventually befall the natural resources of the land.



Ahead of his time in a philosophy of land management concepts, Marsh prophesied:

*It is certain that a desolation... awaits an important part of the territory of the United States... unless prompt measures are taken to check the action of destructive causes already in operation. (Udall, 1963:91-92)*

Such a desolation did await the land. For many years, men had failed to heed the warnings of nature. The result was a resource in a state of degradation and extreme deterioration. Having been heavily utilized and subjected to intense practices of row cropping, the land lost its fertility and productivity. "Land failure meant the failure of people" and farm abandonment, tax delinquency, and a barely existing rural community existed in the region surrounding Clemson College in the early thirties.

Stewart Udall parallels the economic bankruptcy of the Great Depression years as being "closely related to the bankruptcy of land stewardship." He further proposes:

*In a sense, the Great Depression was a bill collector sent by nature, and the dark tidings were borne on every silt-laden stream and every dust cloud that darkened the horizon. (Udall, 1963:149-150)*

These lands of the present Clemson Experimental Forest, once the home of the Indian, the medium of timber and wildlife habitat, were indeed the epitome of the "bankruptcy of land stewardship" during the early thirties. For generations, many had contented themselves with the endless supply of available land at their disposal, yet they had failed to properly care for, and manage this valuable resource. Will Rogers once said, "They simply ain't making no more land." Never a more truthful statement was spoken. If they weren't making any more land, there remained but one alternative. That alternative was to reclaim what land they had, and in order to accomplish this, man must cooperate and work in harmony with nature.

Again, George Perkins Marsh had the solution years before the problems surfaced.

*He is to become a coworker with nature in the reconstruction of the dam-aged fabric which the negligence or the wantonness of former lodgers has rendered untenable. He must aid her in reclothing the mountain slopes with forest and vegetable mould, thereby restoring the fountains which she provided to water them; in checking the devastating fury of torrents, and bringing back the surface drainage to its primitive narrow channels. (Udall, 1963:91)*

The stage was set for reclamation of the land. All that was needed was an individual to provide the programs to recover the damaged land, and enable them to regain their rightful place in the role of natural systems. Ultimately, the practice of land conservation would also be realized and accomplished. For now, however, the cry was for action.

# SOUTH CAROLINA

ANDERSON OCONEE  
COUNTIES

CLEMSON  
LAND UTILIZATION PROJECT  
SC 43-1



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# 1934 — Present

# Renewal

## Reclamation

*Men now begin to realize what as wandering shepherds they had before dimly suspected, that man has a right to the use, not the abuse, of the products of nature; ...*

– George Perkins Marsh

In 1933, Dr. George H. Aull, Assistant Director of Research for the South Carolina Experiment Station, and Professor Henry W. Barre submitted a proposal, “The Fant’s Grove Community Development Project,” under the guidelines of the Resettlement Administration of President Franklin D. Roosevelt’s “New Deal” program to Washington, D.C. The purpose of the Resettlement Administration was to remove families from their farms of submarginal lands, relocate and reestablish them on more productive farmlands, and then utilize the submarginal lands, not for agricultural purposes, but for the development of “multiple-use” land projects as outlined in the Bankhead-Jones Farm Tenant Act.

The proposal formulated by Dr. Aull and Professor Barre included plans for the purchase of approximately 75 farms, relocation of the farm owners, and extensive land use projects including: pollution control, reforestation, and historic building restoration. The administration in

Washington found the proposal too plain and moderate, and following expansion and revision, it was resubmitted in 1934 as “The Clemson College Community Conservation Project”.



Approved by the Federal Government on August 7, 1934, the Clemson Land-Use Area (the official title) was the beginning of the present Clemson Experimental Forest. The new proposal had included provisions for wildlife sanctuaries, botanical

gardens, purchase of 35,000 acres of land, and gave Clemson Agricultural College the responsibility as the managing agency when the developments were essentially completed.



Spanning the years 1934 - 1938, the Federal Government purchased 206 separate parcels of land, totaling 27,400 acres, under the guidelines of the Bankhead-Jones Farm Tenant Act. Reclamation of these lands under Dr. George Aull's supervision included several projects completed through the Works Progress Administration.

These WPA projects were activities designed to provide jobs for the hundreds of unemployed individuals during the Great Depression of the 1930's. The WPA was responsible for the development of the Lake Issaqueena Recreation Area, which included construction of picnic shelters; a boat dock; a boat house; a bathhouse; hiking trails; campfire circle and many other land management improvements, following the construction of the dam.

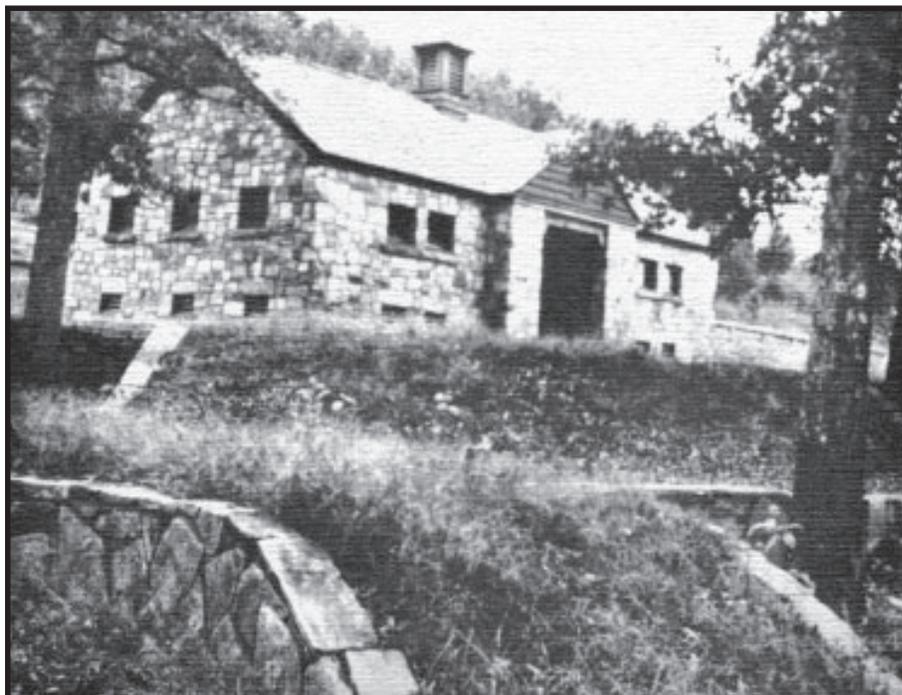
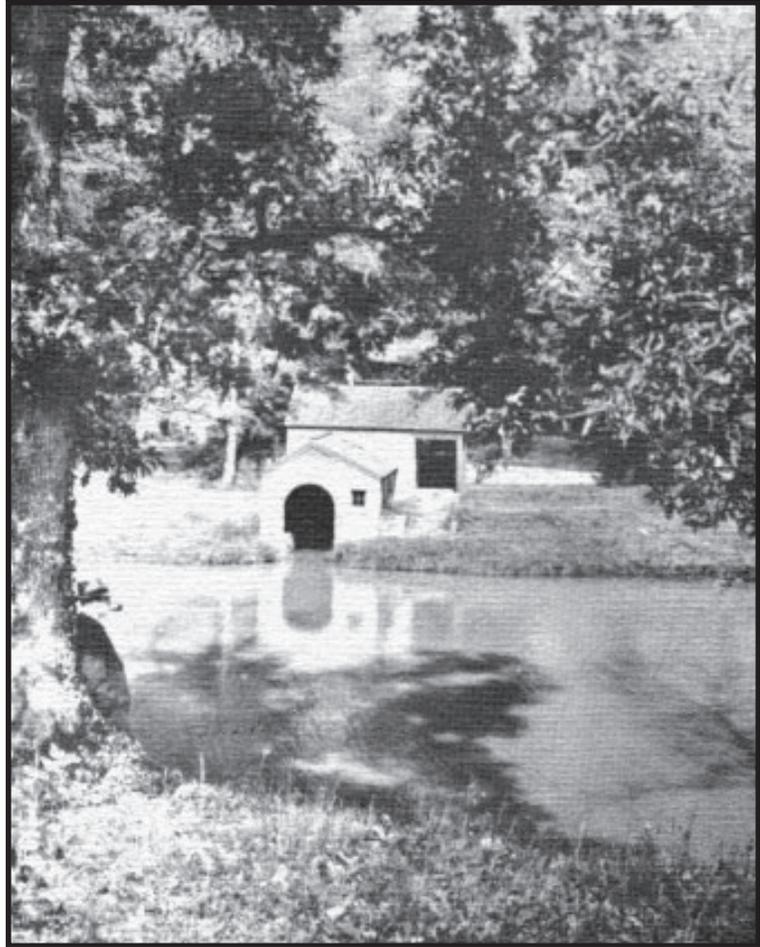
Mr. Charles Nuite replaced Dr. Aull as supervisor, as Dr. Aull returned to the South Carolina Experiment Station in 1936. Mr. Nuite was the first forester assigned to the Land-Use Project and directed reforestation of over 5,000 acres.

Feeling that the administration of 27,400 acres might become troublesome, the Clemson College Administration wavered on the Land-Use Project. However, Dr. Aull, with added support from several Trustees, was successful in persuading Clemson College to accept the land with the provision that the legislature would allot an annual appropriation of \$10,000 for its operation. (Aull, 1973: Transcribed Tape)

In 1939, Clemson College then entered into a 95-year cooperative and license agreement with the Federal Government in which the Government retained mineral rights to the land and the receipts from timber sales would be placed in a general Special Land-Use Area fund administered by the College.

For the token price of one dollar on December 22, 1954, the 27,400 acres of land were deeded to Clemson College. (Appendix E) During the intervening years spanning lease and actual ownership, vandalism had run rampant at the Lake Issaqueena area and parts of the Northern Division of the forest were utilized as a practice bombing range during World War II.

However, despite the neglect, vandalism, and the unusual



utilization of the forest during those years, one outstanding episode occurred. Mr. N.B. Goebel was appointed Forest Manager in 1947, and the first extensive program of forest management was established. With this venture into proper land management, the Clemson Land-Use Project materialized into the Clemson Experimental Forest.

## Forest Management

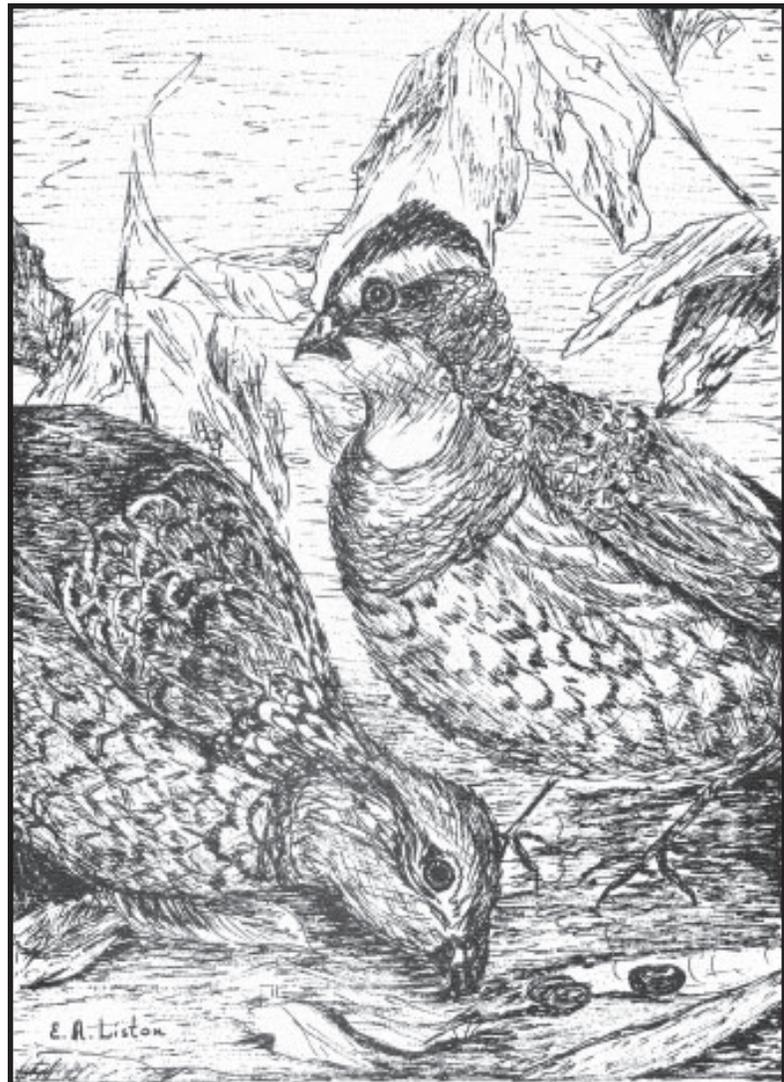
*The fundamental idea of forestry is the perpetuation of forests by use. Forest protection is not an end in itself; it is a means to increase and sustain the resources of our country.*

*– Theodore Roosevelt*

An intensive and encompassing forest management program was implemented during Mr. Goebel's service as forest manager, beginning in 1947, and ending in 1957. This management program included: cruising the area, delineating stands, utilization of aerial photographs to determine and establish boundaries and Divisions and Compartments as management units, reforestation and thinning practices, and improvements in the Lake Issaqueena Recreation Area. Mr. Goebel also negotiated with the Champion Paper and Fiber Company in North Carolina. These negotiations resulted in an arrangement for the marketing of forest products to the Company.

1956 was a significant year in the future of the Forest. During the Fall of 1956, the establishment of a Department of Forestry, with Dr. Koloman Lehotsky as its first head, within the College of Agriculture, Clemson College, paved the way for the utilization of the Forest as an outdoor laboratory for teaching and research programs in resource management. Thereafter, management practices were guided toward achieving this purpose as an outdoor laboratory.

Another event of significance in 1956 was the initiation of the Army Corps of Engineers' Hartwell Dam Project which resulted in the construction of Hartwell Reservoir during 1958 - 1959. This project served to inundate 7,667 acres of the College's prime bottomlands, 5,626 acres of which were in forest. Additionally, archeological studies and



investigations had been conducted on the land to be inundated during the planning phases of the Hartwell Project in 1952 - 1953. Lost to the waters of the reservoir were Essennecca village, numerous other early Indian habitations, and speculation includes the site of the "Treaty Oak" also.

Following Mr. Goebel, Mr. Marlin H. Bruner became the second forest manager and continued the direction of management practices until his retirement in 1971. Mr. Larry D. Reamer succeeded Mr. Bruner and holds the current position as forest manager of the Clemson Experimental Forest.

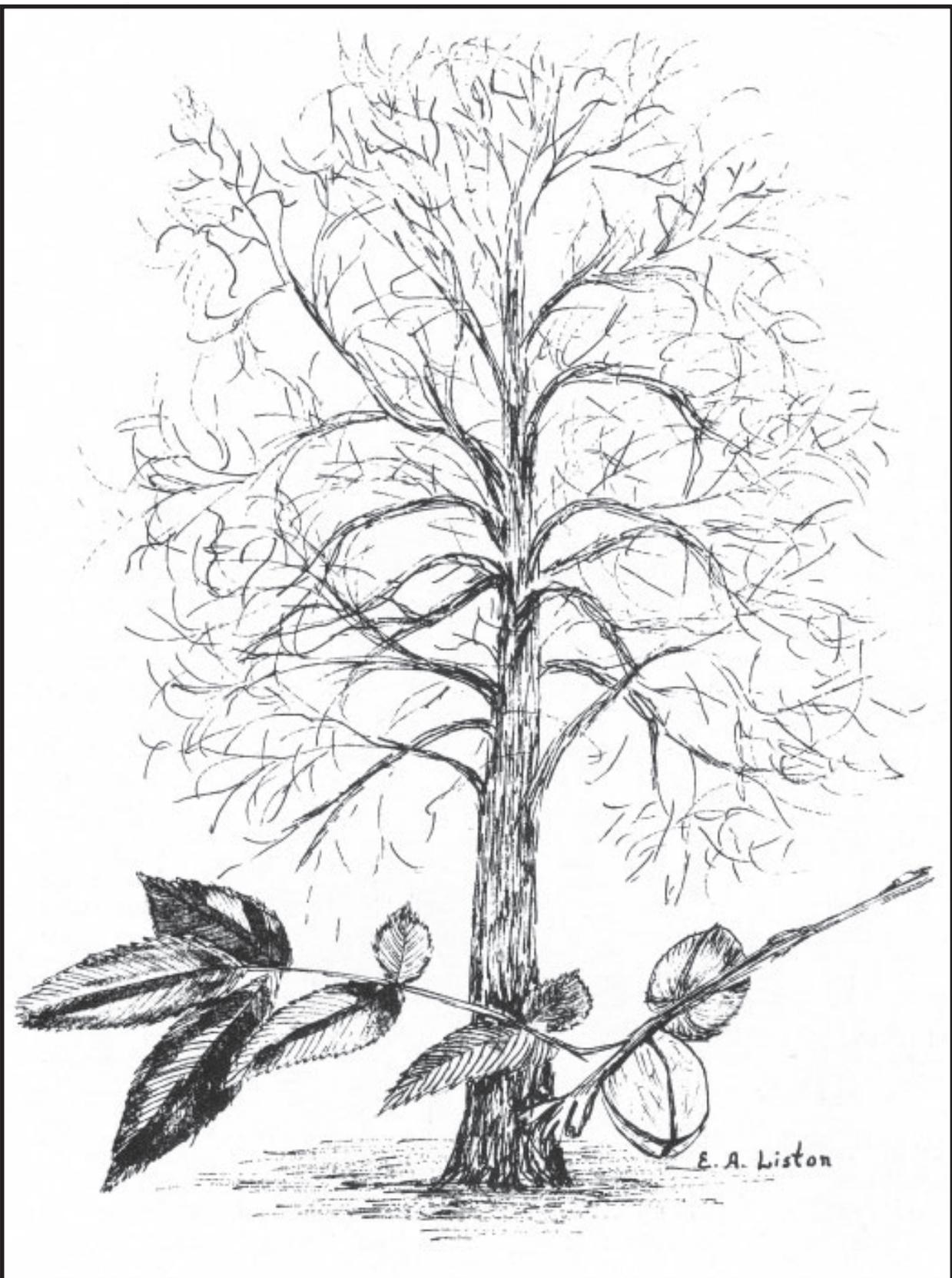
Management guidance and direction under these three forest managers in the past 30 years have resulted in a valuable resource from once unproductive land. In a cooperative agreement with the South Carolina Wildlife Resources Department in 1949, certain areas of the Forest are set aside as game plots and wildlife sanctuaries. (Appendix F)

Further, general management of the Forest includes removal of illegally dumped trash, boundary line postings, timber sales, research and stand examinations, facility improvements, recreation planning, etc., which all function in the continuance of successful operation of the resource.

Larry Reamer, present forest manager, summarizes the management of the Clemson Experimental Forest as follows:

*The overall management of the forest is imposed in such a way as to augment the natural beauty of the countryside by providing variety, harmony, and contrast. It seeks to provide for the development, upgrading, and promulgation of recreational opportunities. The effects of all management activities on the trees and associated vegetation, soil, water, and wildlife are constantly reviewed to insure maximum conservation of these resources.*  
(Reamer, 1974:1)

Management conserves the natural resources of the Forest, and additionally functions to achieve the "multiple use" concept of forest utilization. Conservation of natural resources of the Clemson Experimental Forest are the central concern of management guidelines and practices.



## Natural Resources

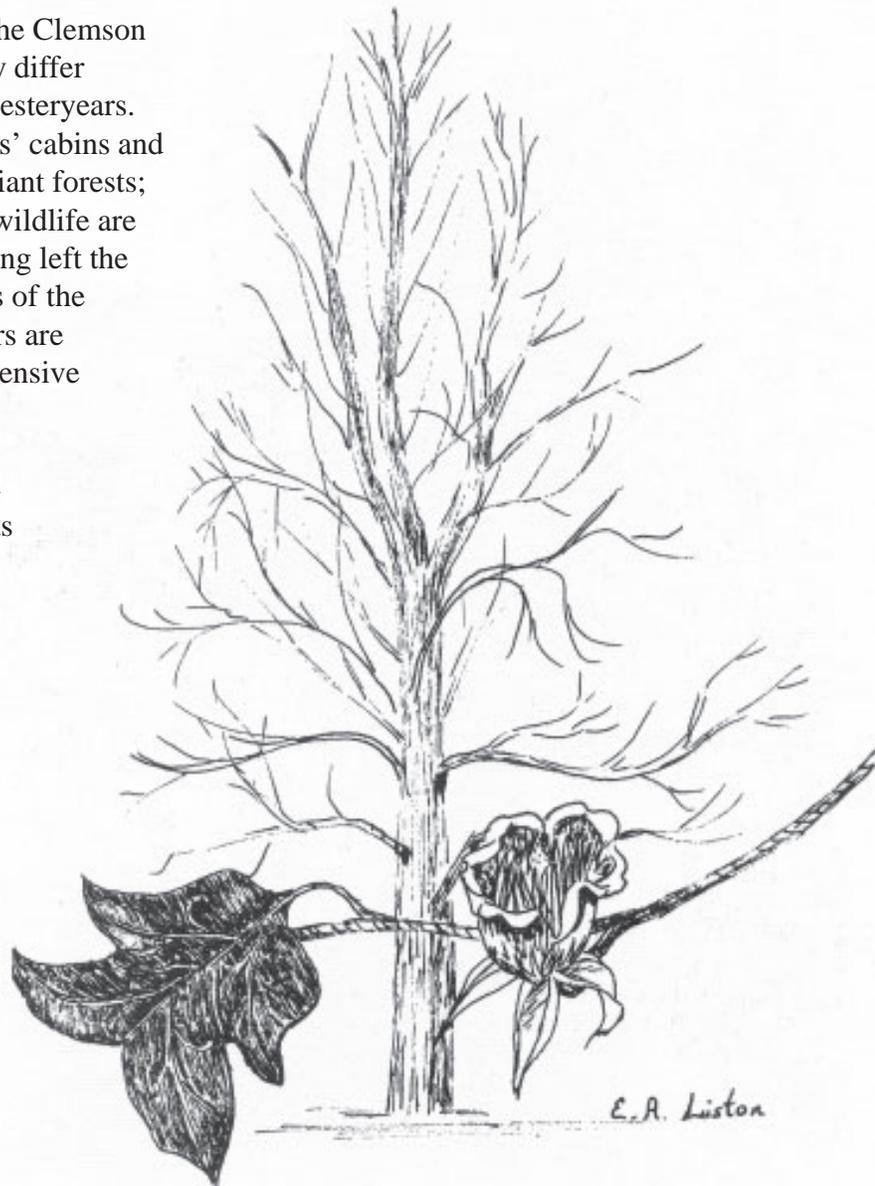
*Who would not rise to meet the expectation of the land?*

– Henry David Thoreau

Until now, the majority of the history of the Clemson Experimental Forest has involved the human story, with the focal point being the land, its changes, and subsequent recovery. Accurate and successful interpretation involves both the human and natural history of a resource, and throughout this narrative of the Forest, *“In the Face of Change,”* the land has been the main participant in the events that have occurred. There is a need to portray the natural resources of the Forest as they presently exist, whether it be loblolly pine or meandering creek, for these resources are just as important in the Forest story today, as they were hundreds of years ago.

The natural resources of the Clemson Experimental Forest today differ somewhat from those of yesteryears. Gone, to the early pioneers’ cabins and croplands are Bartram’s giant forests; Logan’s many species of wildlife are less numerous, many having left the region; and, most portions of the Seneca and Keowee Rivers are the channels of a vast, extensive reservoir, Lake Hartwell.

Yet, the natural scenes are still present. The forest has been resown, and the wildlife is increasing. Some 98 miles of Forest land are adjacent to Lake Hartwell, a seldom recognized asset of the Forest and of the Lake. Here lie unspoiled lakeshore areas, a resource free from human encroachment. For those who enjoy wandering, the 17,000 plus acres of the Forest are in a setting conducive to such a pursuit.



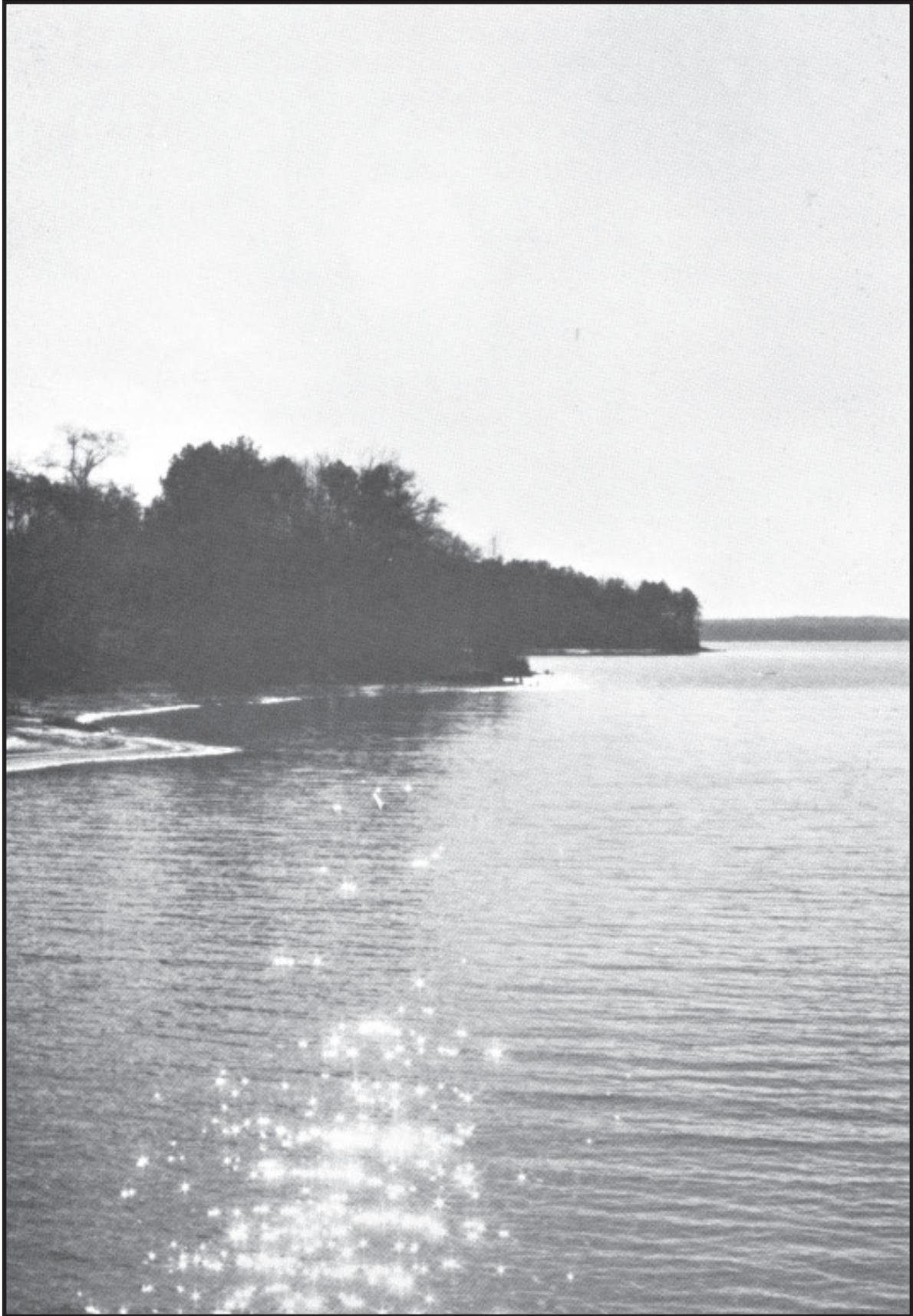


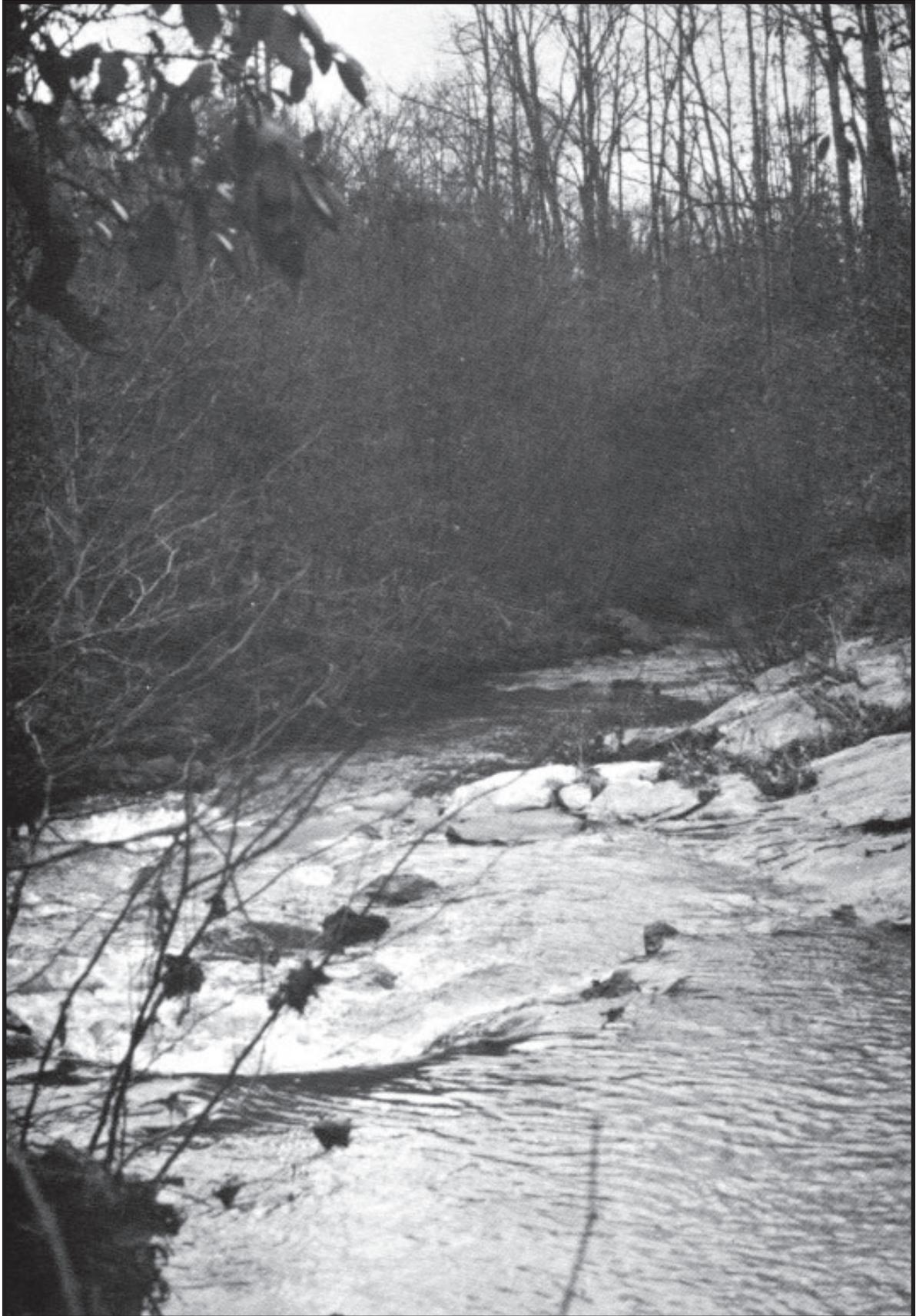
Numerous streams and creeks wind through the Forest – Twelve Mile and Todds, the more familiar. Easily, the most attractive site on the Forest is the waterfall on Todds Creek: A natural energy force of free-falling water, which cascades down its rock laid channel, Todds Creek waterfall is a quiet setting in which to enjoy nature in one of its most beautiful stages.

There are other resources of the Forest which one seldom considers as being natural resources. These include the fact that: the Forest serves as a natural buffer zone, a green-line area of timber, streams, and lake; an extensive watershed for the immediate area; a managed and conserved portion of the Carolina foothills region of the Appalachian Mountains; a place of quiet refreshment; and, in excess of 17,000 acres of open space, a price-less commodity in today's hectic, land hungry world.

To better illustrate the natural resources of the Forest, the following photo and sketch essay portrays a short interpretive inventory, documenting the natural side of the Clemson Experimental Forest. Additionally, throughout the prospectus, the flora and fauna of the Forest have been illustrated. Let us now visit the Forest, and enjoy its many treasures.







## Multiple Use

*I'd rather be a forest than a street...*  
– Paul Simon and Art Garfunkel, 1970

*If there is magic on this planet, it is contained  
in water.*

– Loren Eiseley

*Wildlife once fed us and shaped our culture.  
It still yields us pleasure for leisure hours...*  
– Aldo Leopold

*To promote perception is the only truly  
creative part of recreational engineering.*  
– Aldo Leopold

Gifford Pinchot, often referred to as the “father of forestry”, was riding his horse through Rock Creek Park in Washington one cold February day in 1907. He recalled that “suddenly the idea flashed through my head that there was a unity in this complication – that the relation of one resource to another was not the end of the story.” (Udall, 1963:117) Pinchot had grasped the beginning of a concept which would not be initiated until 1960. This concept, multiple use, entails the utilization of one resource for a variety of uses. In essence, multiple use is an economic term, seeking to provide the most benefits for the least cost.

Aldo Leopold, initiator of the first Forest Wilderness Area in the United States, presently the Gila National Forest, was the first to champion the multiple use concept. As a forester, Leopold thought the purpose of the forests was to provide the “greatest good to the greatest number in the long run.”

In dealing with multiple use one should consider as primary factors: the proper balance of management techniques, resource capabilities of the land, and needs of the people utilizing the resource. Basically, multiple use, as outlined in the Multiple Use and Sustained Yield Act of 1960, focuses on utilization of a forest resource for timber, water, wildlife, and recreation.

What do the multiple use concept and the Clemson Experimental Forest have in common? Essentially, multiple use is encouraged in the management of the Forest. However, it is “subject to the constraints imposed by the basic purpose of the Forest – education, research, and demonstration.” (Reamer, 1974:1)



Under multiple use objectives, the Clemson Experimental Forest provides a continued return of timber, water, wildlife, and recreation. Today, the Forest contains a little over 17,000 acres, and functions in the area of three broad designations to achieve its multiple use objectives. These designations are academic pursuits, scientific investigations, and social benefits. Larry Reamer proposes that “multiple use on the Clemson Experimental Forest is not a concept, but a fact.” (Reamer, 1976)

Through proper interpretation, the concept of multiple use can be further advanced. For the greatest contributions of the Clemson Experimental Forest lie in the future. As greater demands are placed on our natural resources, more and more individuals will turn to such “islands of hope” as the Clemson Experimental Forest, not only for the resources of land, water, and timber, but for the spiritual enlightenment which rests in the hand of our natural systems.

# *Interpretive Methodology*

*In reality the greatest of blessings come to us through madness, when it is sent as a gift of the gods...madness, which comes from god, is superior to sanity, which is of human origin.*

– Plato

*There is a method in my madness...somewhere.*

– H. Jesse Grove

Interpretive methodology embraces many facets of communication ranging from an elaborate audiovisual presentation to the simplest wayside exhibit. Therefore, the means by which an interpretive message may be presented and interpretation dispensed, are numerous and varied.

What follows are types of interpretive media and facilities which may or may not lend themselves to the resources of the Clemson Experimental Forest. These illustrative and diverse types of interpretive methods will be recommended by the author if applicable to the Forest in the chapter that follows: Interpretation: Recommendations.

Freeman Tilden in his second principle of interpretation states:

*Information as such is not interpretation. Interpretation is revelation based upon information. But they are entirely two different things. However, all interpretation includes information. (Tilden, 1967:9)*

Information may be dispensed in a variety of ways, but the art of taking the basic information and creating an interpretive story requires facilities, media and an interpreter. Simply, there must first be something to interpret; secondly, an audience to interpret to; and, thirdly, an individual to do the interpreting. Without these three elements, there is no need for interpretation.

One of the most abused, heavily utilized, and often poorly interpreted facilities, is the “nature trail.” Trails are subject to creativity and may be unrewarding or delightful, depending upon the planning process. Several types of trails are considered: interpretive trails with accompanying brochures; hiking trails; simple nature trails; and, wildlife observation trails.

Trails, regardless of the type, serve the purpose of getting the visitor into the natural environment and providing an unhurried walk through varied wildlife and floral habitat. Several trails currently exist on the Forest, among them the Treaty Oak Trail and the Indian Creek Trail (located at Lake Issaqueena Recreation Area). Trails can be the most important interpretive facility on the Forest.

Interpretive brochures, relating natural and human history, are another tool of interpretive methodology. Brochures may accompany trails, serve specific sites (e.g. Treaty Oak), or function as a tool for orientation to a resource. A brochure



is something one may carry away with him from a site, and should be approached from this viewpoint, rather than from the standpoint that it is simply another piece of litter.

Wayside exhibits, trailhead stations, and cluster information stations serve to dispense interpretation on a varied number of subjects through numerous methods. These facilities can incorporate maps, written regulations, short interpretive narratives, and exhibits within their framework. Trailhead stations are extremely beneficial by enabling a visitor to gain an overall feeling for what he may experience on the trail. Wayside stations may provide simple

and yet provocative exhibitry, as well as serving as rest stops. A cluster type of information station may contain varied exhibits, maps, and also trailhead stations.

An interpretive complex, such as a visitor center, is usually the main focal point of interpretation on a resource. Within the visitor center complex, one may find audiovisual presentations (e.g. slide show or movie); artifact collections; displays; and personnel to aid in the conveyance of the interpretive message. These complexes should be a stimulus, the starting point of an individual's visit, and serve in orienting him to the exact facilities and opportunities which are available during the duration of his visit. Visitor centers are not meant to be conclusive within themselves, but merely serve as a means to achieve a future end – that end being *to get the visitor onto the actual site and let him experience firsthand the sights, sounds and “hidden messages” of the resource.*

By far the best type of interpretive methodology is that which is given through an on-site interpreter. An interpreter is a rare individual who can charm, without being overly dazzling; teach, without the use of a textbook; and, above all, inspire, without realizing that he is inspirational. Interpreters should be generalists, familiar with all aspects of a resource, and capable of handling numerous “trite and true” questions, however scientific or trivial. A good interpreter loves his work, and is a little bit of an actor, using the resource base as his stage.

Through an on-site interpreter, contact with other human beings is possible, enabling Tilden's unnumbered principle, the “priceless ingredient,” to be achieved. This principle, very simply, is that of love. For:

*If you love the thing you interpret, and love the people who come to enjoy it,...you not only have taken the pains to understand it to the limit of your capacity but you also feel its special beauty in the general richness of life's beauty. (Tilden, 1967:90)*

# Recommendations

*To know the forest – a beautiful obligation  
To Love the forest – we don't really do it  
To protect the forest – a serious bidding  
To say to men go – unhurt and untroubled  
Wanderer – take something of the repose and  
serenity of the forest with you to brighten  
your day.*

*– German Quotation*

The following recommendations have been formulated to provide the initial interpretive planning for the Clemson Experimental Forest. These recommendations were developed over a period of several months research and on-site investigations into the Forest. For simplicity and clarification, the recommendations are classified under several broad categories: *Management, Planning, Interpretation, outdoor Laboratory, and General.*

These recommendations are to be viewed as flexible, yet they are made with the best interest of the interpretation of the Clemson Experimental Forest at issue. Several of the proposed recommendations will require funding. It is advised that the interpretive planning of the Forest be implemented in a phase approach:

- Phase I - one to three years
- Phase II - three to five years
- Phase III - five years and beyond.

These phases provide a framework which is operational, and changeable. Interpretation, to be successful, requires constant updating and revision, just as planning requires alternatives and modifications. Through the utilization of the phase approach, the recommendations for interpretation of the Forest can be advanced and implemented as funds become available, and the first step of interpretive planning will have been accomplished. The recommendations have accompanying specifications as to the phase in which they should be undertaken.

## Management

- A. The significant sites within the Clemson Experimental Forest should be classified as natural, historic, or recreational. Management should then be compatible with the site designation. A proposed classification for the sites is contained in the narrative which accompanies the map of the sites at the end of this chapter. *Phase I*
- B. Each historic site of determined significance should be properly pre-served through the establishment of a protective buffer zone around the site. *Phase I*
- C. There should not be direct access for visitors to every historic site within the Forest. This is presented to deter and prevent individuals from vandalizing and encroaching upon the more fragile historic sites. *Phase I*



## Planning

- A. An archeological survey of the sites of “Indian Hill” and the “Arrowhead Factory,” should be conducted by qualified personnel to determine if any significant artifacts exist. *Phase II*
- B. The events of the “Treaty Oak” should be carefully researched and documented through the development of an interpretive prospectus and conceptual site plan for the monument site. *Phase I*
- C. Each time frame within this prospectus (e.g., 1600-1785; 1785-1934; 1934-Present; and other components, such as Wildlife, etc.) should be further researched for interpretive themes and subthemes, and a separate interpretive study prepared for each one with actual interpretive planning as the major thrust of the document. (Brochure development, Exhibits, etc.) *Phase I*
- D. A conceptual site plan and interpretive prospectus for the site of Fort Rutledge should be prepared to serve in joint interpretation with the interpretive development of “Treaty Oak.” *Phase I*
- E. A conceptual site plan for the future protection and preservation of the Colhoun Graveyard and other graveyards within the Forest should be prepared. *Phase I*

## Interpretation

### A. "Treaty Oak" should have the following: *Phase I*

- Development of a signing system compatible with the existing trail.
- Development of an informational brochure on the events of "Treaty Oak."
- Development of an interpretive information station, which would include exhibits and displays of the Cherokees and the Colonists, the events of the "Treaty Oak," maps of the area prior to inundation by Lake Hartwell, and a sign depicting the trails of the monument site.

### B. There should be developed and planned an interpretive trail to connect the site of Fort Rutledge with the monument area of "Treaty Oak." With the construction of the trail, proper signing should then be developed that is compatible with both the sites and serves as a link to bridge the historic events of the two resources. *Phase II or III*

### C. There should be interpretive wayside exhibits for the following:

- John E. Colhoun
- Keowee Heights plantation - Stagecoach era
- Hopewell
- Treaty Oak
- Cherokee life-styles in the area
- Benjamin Lawrence/American Revolution
- Grist mill operation at Todds Creek

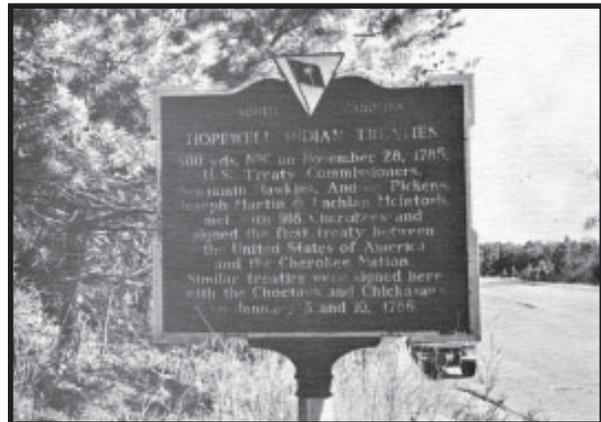
#### *Phase II*

### D. Lake Issaqueena Recreation Area should have the following:

- Development of visitor information stations to be placed at the entrances to include:
  - Brochure on Lake Issaqueena Recreation Area – Brochure on Clemson Experimental Forest
  - Location map of Lake/ map of Lake/boat access ramps
  - Regulations
  - Map of existing trail systems
  - Exhibit on the "Arrowhead Factory" without access to the site until archeological investigations have been conducted.

#### *Phase II*

### E. Todds Creek area should be developed as a Natural site with compatible day-use activities such as nature trails, wildlife observation, and picnicking. This is essentially a redevelopment of the Todds Creek area. There should be regulated use of the site to avoid overuse, and activities should be limited. *Phase III*



F. Interpretive tours/talks should be given on the Forest at the request of community groups, clubs, organizations, and interested individuals. These tours/talks should be developed to cover a wide range of Forest management practices, as well as the historical aspects of the Forest. They should not be scheduled at the present, but given on a request basis to determine the need and interest for regular and scheduled tours/talks on a once a month system for the future. Individuals should contact the forest manager for a tour/talk, and he will arrange the date, time, and transportation. *Phase I*

G. An interpretive slide presentation on the Clemson Experimental Forest should be prepared. This would include the history of the Forest, as well as the present and future direction of the resource. Ideally, this show would be developed for a caramate-type of projector, which is capable of being easily transported for display at meetings, conventions, and other College functions in which the Forest should be represented.  
*Phase I*

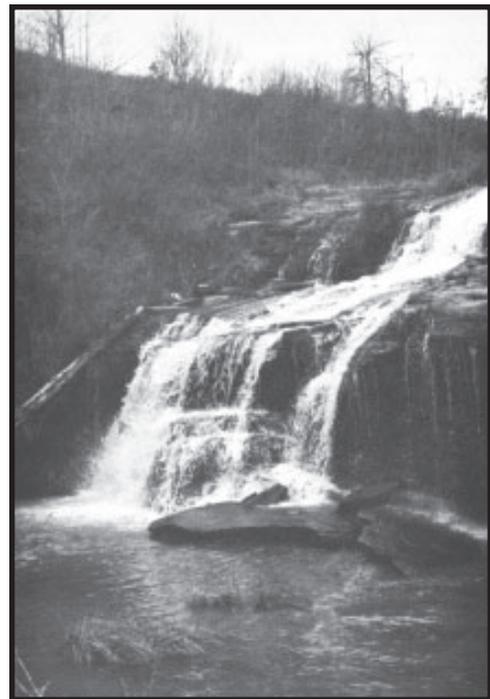
H. Development of an interpretive exhibit and display to be placed in the lobby of the Forest and Recreation Resources Building. This would include the following:

- 1) Present map with documented historic sites/accompanying narrative
- 2) Brief history of the establishment of the Forest
- 3) Brochures on the Forest and selected historic sites (“Treaty Oak”)
- 4) Location map of the Forest in relation to the region
- 5) A “rotating” interpretive display which would change every 3-4 months, and would interpret various facets of the Forest, *In the Face of Change*. These facets could include such specific items as:
  - Cherokee artifacts
  - Early pioneer tools/cooking cutlery/artifacts
  - Early agricultural tools/machinery
  - Forest management tools
  - Photography and artwork displays
  - Wildlife exhibits

*Phase II*

- I. Brochures should be prepared for the following:
- Clemson Experimental Forest
  - Lake Issaqueena Recreation Area - “Treaty Oak”
  - Fort Rutledge
  - Trails at Lake Issaqueena Recreation Area
  - Historic sites on the Clemson Experimental Forest

*Phase I*



## Outdoor Laboratory

The Recreation-Outdoor Education Research Laboratory, administered by the Department of Recreation and Park Administration, is located five miles west of Clemson on Lake Hartwell, near the Twin Lakes Recreation Area. Its natural setting on lands of the Clemson Experimental Forest provide a base for not only recreation, but educational pursuits as well.



Most facilities of the Outdoor Laboratory are now complete, and are available to interested groups and organizations during all months except June, July and August. During the summer months, the Outdoor Laboratory provides camp sessions for special populations of South Carolina.

With excellent facilities and a natural environmental setting, the Outdoor Laboratory is truly a “multiple value” facility. One of these “values” can be achieved and advanced through interpretive programs. With this thought in mind, the following recommendations for interpretation of the Clemson Experimental Forest are made, with specific reference to the Outdoor Laboratory.

1. The Outdoor Laboratory should be utilized as a starting point and orientation center for on-site interpretive tours of the Forest. *Phase I*
2. On-site programs, dealing specifically with wildlife and forest management, can be presented for the public utilizing the Laboratory and its natural surroundings as the medium through which to convey a number of interpretive messages. *Phase I*
3. Specific interpretive tours/talks on the purpose and objectives of the Outdoor Laboratory can be prepared and presented, as a separate interpretive program or as a part of a program on the “multiple use” aspects of the Clemson Experimental Forest. *Phase I*
4. An interpretive plan and prospectus, focusing on the usage of the Outdoor Laboratory for on-site programs not only for the general public, but for the special populations of the camp sessions, should be prepared. *Phase I*

## General

A. There should be joint cooperation between the Department of Forestry and the Department of Recreation and Park Administration in researching, planning, and developing the interpretive resources within the Forest. *Phase I*

B. There should be experimental utilization of the resource by the students of Methods of Environmental Interpretation, both undergraduate and graduate, within the Department of Recreation and Park Administration to aid in the development and planning of tours, exhibits, displays, brochures, slide shows, and interpretive trails for the Clemson Experimental Forest. *Phase I*

C. There should be placed an interpretive information station about the Forest within the Pendleton District Historical and Recreational Commission Headquarters, the Pendleton Agricultural Museum, and the Clemson University Union on campus. These information stations would include:

- Map of the Forest
- Brochures
- Regulations (may be in brochure)
- Narrative on the purpose of the Forest, its benefits and opportunities for recreation pursuits
- Photographs, drawings as recommended or needed



### *Phase II*

D. There should be employed by the College of Forest and Recreation Resources a full-time interpretive planner to function in the development of trails, information stations, wayside exhibits, tours/talks, special presentations, general management of the resource, and varied interpretive needs of the Clemson Experimental Forest as they arise. This individual would work closely with the Department of Recreation and Park Administration in interpretive methodology; additionally, this individual would serve as a resource person for various private timber companies and organizations which have need for interpretive planning of their resources. *Phase I*

# Summary

## I. *Phase I:*

- Classification of sites as natural, historic, or recreational.
- Buffer zones established for significant historic sites.
- No direct access provided for visitors to every historic site.
- Interpretive studies conducted for each time frame classification proposed in this document.
- Preparation of a conceptual site plan for Colhoun Graveyard.
- Preparation of a conceptual site plan and interpretive prospectus for the site of Fort Rutledge.
- Interpretive planning for “Treaty Oak.”
- Development of an interpretive slide presentation on the Forest.
- Initiation of interpretive tours/talks on a request basis.
- Brochure development for specified areas.
- Cooperation between the Departments of Forestry and Recreation and Park Administration in the planning of the interpretive resources.
- Experimental utilization of the Forest by the students of Interpretation in the Department of Recreation and Park Administration to assist in the interpretive development of the resources.
- Employment of an interpretive planner for the College of Forest and Recreation Resources.
- Utilization of the Recreation Outdoor Education Research Laboratory as the starting point for interpretive programs; additional utilization of the Laboratory as a medium to provide interpretive programs on-site, and through direct public contact.

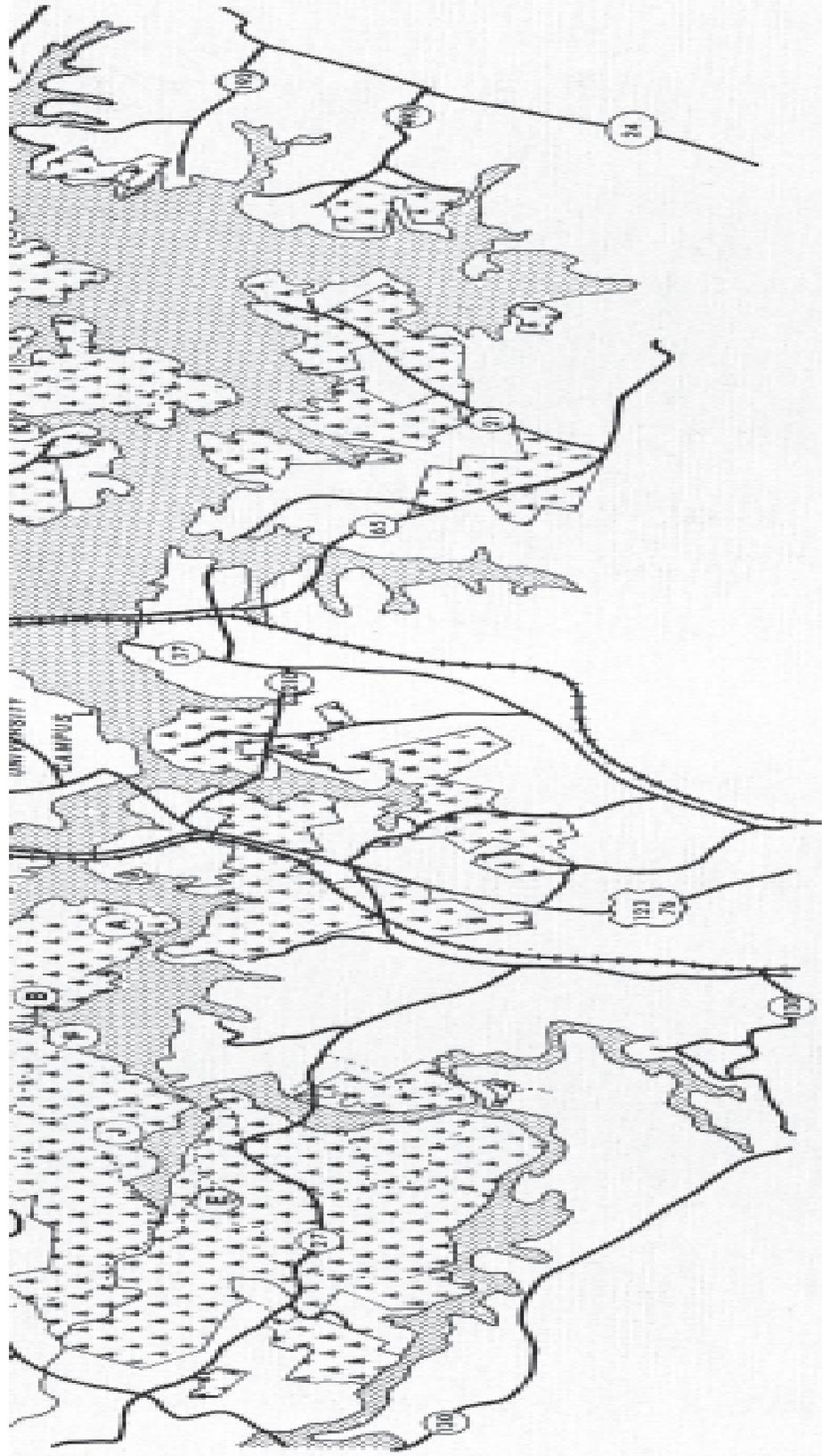
## II. *Phase II*

- Archeological surveys of the sites of “Indian Hill” and the “Arrowhead Factory.”
- Preparation of an interpretive prospectus and conceptual site plan for the “Treaty Oak” site.
- Development of a connecting trail between the sites of Fort Rutledge and the “Treaty Oak” Monument.
- Development of interpretive wayside exhibits for specified areas.
- Development of information stations for the Lake Issaqueena Recreation Area.
- Development of an interpretive exhibit and display for the lobby of the Forest and Recreation Resources Building.
- Development of interpretive information stations to be placed at designated areas in the immediate Clemson-Pendleton region.

### III. *Phase III*

Redevelopment of the Todds Creek Area as a Natural site with compatible day-use activities.

- A. *Keowee Heights Historic Site* - Located at the confluence of the Twelve Mile and Keowee Rivers, the elaborate plantation of the John E. Colhoun family was constructed during the early 1800's. The Colhoun Family Graveyard lies on a hill near the remains of the plantation home.
- B. *Benjamin Lawrence Grave Site* - Within this wooded cemetery plot, lies the singular marked tombstone of Benjamin Lawrence, a reputable scout for General Andrew Pickens during the Revolutionary War.
- C. *Treaty Oak Historic Site* - Located on the Hopewell Plantation of General Andrew Pickens, the monument to the "Treaty Oak" commemorates the first treaty between the newly established United States government and the Cherokee Indian Nation on November 28, 1785.
- D. *Hopewell* - This frontier plantation home of General Andrew Pickens, and later his sons, was constructed on the edge of the Indian wilderness in 1784.
- E. *Arrowhead Factory Historic Site* - Attesting to the need of the native Americans, the "Arrowhead Factory" is a wooded ridge with granite rock outcroppings. Here the Indians quarried stone for implements and tools.
- F. *Indian Hill Historic Site* - Locally referred to as "Indian Hill," the highest point in the Forest is a wooded bluff with a commanding view of Lake Hartwell. It is believed to be the burial ground of local Indian tribes.
- G. *Todds Creek Natural Area* - Once the location of a thriving grist mill operation, the natural setting of Todds Creek provides a quiet and beautiful place to enjoy nature.
- H. *Old Stage Line* - Traces of the old stage road from Pendleton to Old Pickens can still be seen.
- I. *Woodburn Plantation* - Originally built by Charles Cotesworth Pinckney in the early 1800's, Woodburn reflects Southern life at its peak. Under the administration of the Foundation for Historic Restoration in Pendleton, the plantation home is on lands of the original Clemson Forest.
- J. *Lake Issaqueena Recreation Area* - Developed as a project of the Works Project Administration in the 1930's, Lake Issaqueena and its surrounding area provide the opportunity for a varied number of recreation pursuits, ranging from boating to hiking. Evidence of forest management practices are also visible.
- K. *Recreation-Outdoor Education Research Laboratory* - The facilities of the Outdoor Laboratory of the Department of Recreation and Park Administration, serve organized groups seeking both educational and recreation experiences.
- L. *Fort Rutledge Historic Site* - Fort Rutledge was constructed by Colonel Andrew Williamson and his militia during the Cherokee Campaign of 1776. It served as a deterrent to Indian attacks, and is today commemorated by a stone monument. The present site is under the administration of the College of Forest and Recreation Resources, and is to be developed by the Department of Recreation and Park Administration.



# CLEMSON EXPERIMENTAL FOREST

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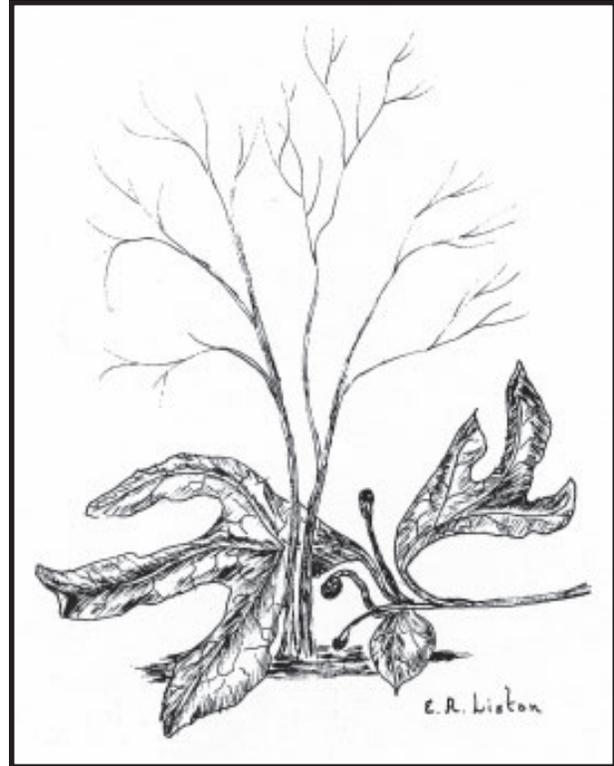
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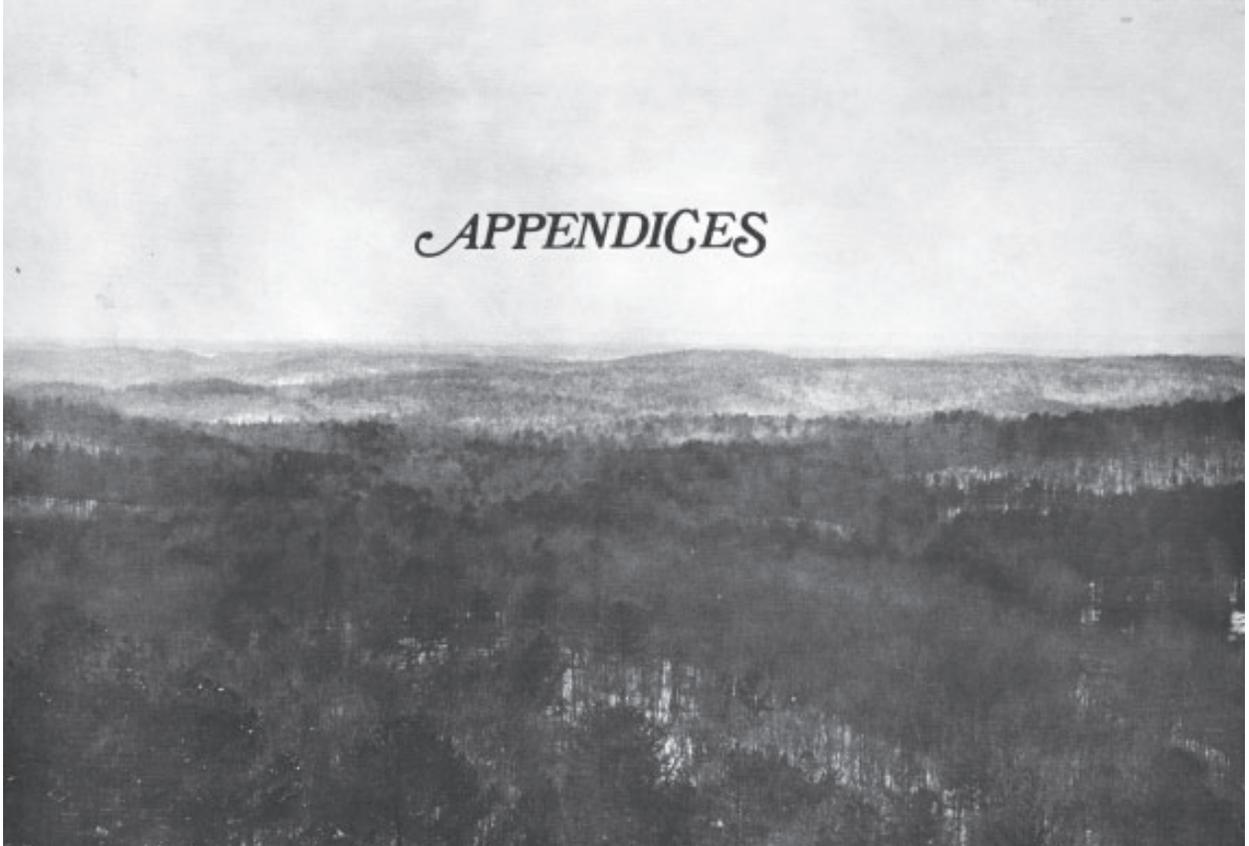
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*APPENDICES*



# Appendix A

## Fort Rutledge

In 1776, Major Andrew Williamson and a force of volunteers marched into Cherokee Country to punish the Indians for their uprisings on the Carolina frontier. During the campaign, these forces erected an earthen fort with wooden palisades on a bluff at the site of the destroyed Indian village of Essennecca. The fort was named Rutledge, for the President of South Carolina, and took approximately two weeks to construct. During the course of the Cherokee Campaign of 1776, it remained garrisoned, offering respite for the weary forces and the terrified colonists.



Fort Rutledge saw a little sporadic action later during the Revolution, and eventually was burned by British and Tory forces in 1780. John C. Calhoun named his plantation near the site of Fort Rutledge, "Fort Hill," commemorating the events and significance of the fort which lay in ruin atop the bluff overlooking the Keowee.

In 1907, Mrs. P. H. Mell spoke out for the preservation of the site.

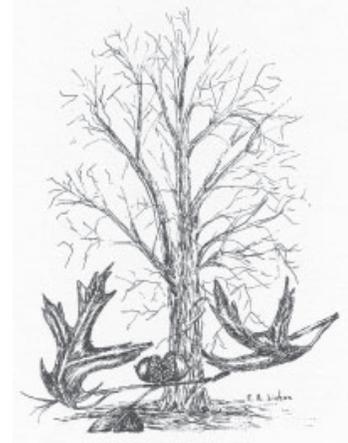
*The remains of the fort are well worth preserving for its foundations were laid in a period of storm and stress and suffering; its rude walls frowned upon the Indians early in the Revolution; its watch tower kept guard so that the settler's family in his humble cabin might rest in peace; with its little garrison of three hundred men, it did its work well and effectually intimidated the enemies of the province in this part of the country. (Mell, 1907: DAR Magazine)*

In 1908, the Daughters of the American Revolution and the Trustees of Clemson University erected a monument to commemorate the historical significance of the fort. In December, 1976, the establishment of Fort Rutledge Historic Site was approved by the Cabinet of Clemson University. The memorandum for record of the Cabinet meeting states:

*In recognition of the significance of Fort Rutledge to Clemson University and the State, the area is hereby declared an historic site and is assigned to the College of Forest and Recreation Resources for preparation of a long-range site development plan and a continuing interpretive program as a part of the teaching and research conducted by the Department of Recreation and Park Administration. (Clemson University Cabinet Meeting Memorandum, December 29, 1976)*

# Appendix B

## Synopsis of the Hopewell Treaty



Treaty with the Cherokee Nation:

“Articles of a Treaty concluded at Hopewell, on the Keowee, between Benjamin Hawkins, Andrew Pickens, Joseph Martin and Lachlan McIntosh, Commissioners Plenipotentiary of the United States of America, of the one part, and the Head-Men and Warriors of all the Cherokees of the other.”

“The Commissioners Plenipotentiary of the United States in Congress assembled give peace to all the Cherokees, and receive them into the favor and protection of the United States of America, on the following conditions:”

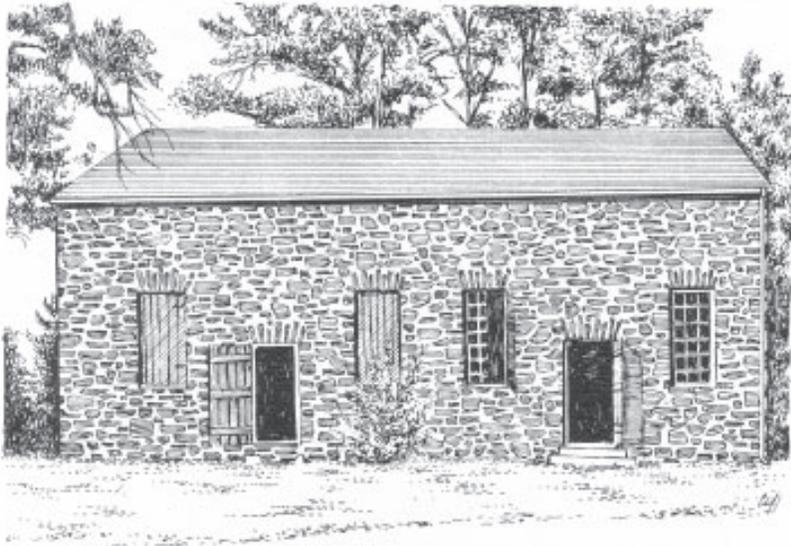
Agreement to:

- Art. I. Restore all prisoners, citizens of the United States, or subjects of their allies, to entire liberty.
- Art.II. Restore all the prisoners taken from the Indians to the Head-men and Warriors.
- Art.III. The said Indians for themselves and their respective tribes and towns do acknowledge all the Cherokees to be under the protection of the United States of America.
- Art. IV. Boundaries of the Cherokee hunting grounds. From the South Carolina Indian Boundary and along the same Southwest over the top of the Oconee Mountains till it shall strike Tugalo river; North and northwest to the mouth of the Duck River on the Tennessee.
- Art. V. Settlement of whites in these hunting grounds forbidden.
- Art. VI. Indians to surrender those who commit capital crimes on those who are citizens of the United States.
- Art. VII. Reciprocal agreement.
- Art.VIII. Punishment of innocent, pronounced unjust and not to be practiced.
- Art. IX. United States Congress to have exclusive right to regulate trade with the Indian.
- Art. X. Traders have liberty to go to trade with Cherokees.
- Art. XI. Indians to give information of designs against the peace, trade, interest of the United States.
- Art. XII. Indians given right to send deputy to Congress. Art.XIII. Hatchet forever buried, and the peace universal.

Signed at Hopewell on the Keowee, 28 November, 1785.

# Appendix C

## *The Old Stone Church*



Old Stone Church began with the erection of a little log meeting house near the home of Ezekiel Pickens, son of Andrew Pickens, in 1790. Many of the individuals in the first organizational meeting were veterans of the Revolution. The little church was called “Hopewell on the Keowee.” Following the unfortunate destruction of the church in a forest fire in 1796, plans were made to erect another church a few miles south from the site of the burned one. Old Stone

Church was built on lands donated by printer John Miller nearer the village of Pendleton.

Subscription was the means by which Old Stone Church was completed. Contributors included: Andrew Pickens, Robert Anderson, George Reese and a Mr. Colhoun (or perhaps John E. Colhoun?). Foundation of the church was laid in 1797. Built of native stone, “the solid walls rise on a simple quadrangular foundation, with huge windows and a door that was small by comparison.” (Klosky, 1971: 25)

Completed sometime around the turn of the century, the pastor of Hopewell, Dr. Thomas Reese, did not live to see it completed and was buried in the Old Stone Church Cemetery. Many individuals, influential in the history of the region, are interred in the cemetery. Among these are: John Miller, Sr., publisher of the first Pendleton newspaper; John Rusk, rock mason who built the church; Andrew Pickens, Revolutionary War General; and, other members of the Pickens family, as well as settlers of the region, veterans of almost all American Wars, and the Cherokee Indian, Osenappa.

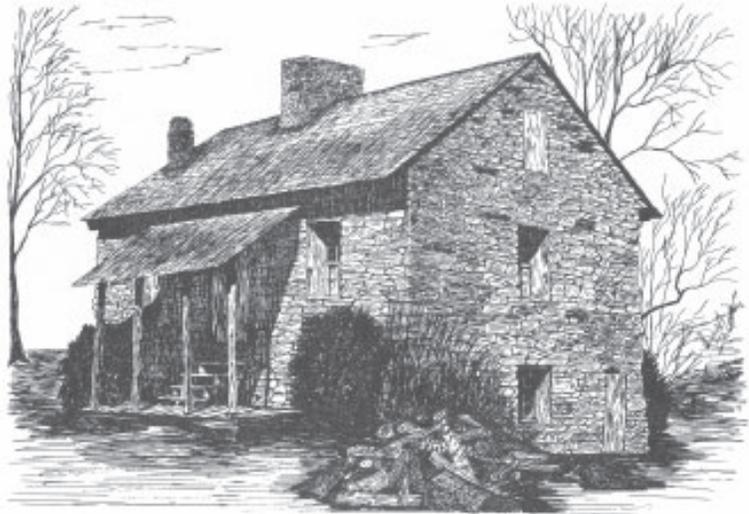
Old Stone Church represents a page of history in the upcountry which has not yet been erased through time. Many of the first settlers of the region sought sanctuary within its stone walls. It therefore serves as a reminder of a period of American history which shaped the destiny of the future, and fulfilled a significant need during its past.

# Appendix D

## Oconee Station

Oconee Station, the oldest building in Oconee County, was erected as a frontier outpost for the protection of early colonists during the Indian conflicts in 1760. The Station was built by the troops of Lieutenant Colonel Archibald Montgomery sent by the King of England to protect the settlers of the Carolina upcountry. With Montgomery was a young man, Captain Christopher French, who recorded the troops' movements in his Journal.

French's entry for Monday, 8th of June, 1760, reads:



*We marched about five, and at about 2 Miles distance we reach'd Ocunnik Mountain which is extremely high and about four Miles over, the preospect from it behind us was very extensive; the ascent was very tedious and troublesome, on our march and not far from Chatughi River, which is Eleven Miles from our last Encampment, we passed a steep Hill down from which there runs a pretty little Rivulet, with abundance of waterfalls... (French, 1760-1: June 8, 1760)*

Initially a protective outpost, the Station served as a trading post and a stagecoach stop in its later years. Michael J. Ellerbrock pinpoints the reasons for preserving the unique Station:

*In this time of need, the Station aided our forefathers in their struggles during the birth of this Nation. Americans have a tradition of discarding things which are no longer of use, or replaced by a technologically 'better' method. To improve is a credit to human nature, but to forget is a fault of ignorance. We should recognize and appreciate the struggles of the pioneers who laid our foundation. To do otherwise would suggest to future generations to ignore the efforts now being made in their behalf. (Ellerbrock, 1975: 14)*

Oconee Station is presently an Historic Park within the South Carolina State Park System, and it has been placed on the list of eligibles for designation as a "National Historic Landmark" by the National Park Service.

# Appendix E

Public Law 237 - 84th Congress  
Chapter 559 - 1st. Session  
H. R. 4280

## AN ACT

To direct the Secretary of Agriculture to release on behalf of the United States conditions in two deeds conveying certain submarginal lands to Clemson Agricultural College of South Carolina so as to permit such college, subject to certain conditions, to sell, lease or otherwise dispose of such lands.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled. That, notwithstanding the provisions of subsection (c) of section 32 of the Bankhead-Jones Farm Tenant Act, as amended (7 U.S.C. 1011 (c)), the Secretary of Agriculture is authorized and directed to release on behalf of the United States with respect to lands designated pursuant to section 2 hereof, the conditions, contained in two deeds, both dated December 22, 1954, conveying certain submarginal lands in Anderson, Oconee, and Pickens Counties, South Carolina, to Clemson Agricultural College of South Carolina, which require that the lands conveyed be used for public purposes and provide for a reversion of such lands to the United States if at any time they cease to be so used.

Sec. 2. The Secretary shall release the conditions referred to in section 1 only with respect to lands covered by and described in an agreement or agreements entered into between the Secretary and the college in which the college, in consideration of the release of said conditions as to such lands, agrees –

- (1) that all proceeds from the sale or exchange of such lands shall be used by the college for the acquisition of lands within the exterior boundaries of the project or for the development or improvement of lands within the project;
- (2) that any lands acquired by the sale or exchange of the lands covered by such agreement shall become a part of the project established on the lands conveyed by the two deeds referred to in section 1 and shall be subject to the conditions with respect to the use of such lands for public purposes contained in such deeds; and
- (3) that all proceeds from the sale, lease, or other disposition of the lands covered by such agreement shall be maintained by the college in a separate fund and that the record of all transactions involving such fund shall be open to inspection by the Secretary.

APPROVED AUGUST 4, 1955.

# Appendix F

A Synopsis of the Cooperative Agreement Between  
The Clemson Agricultural College of South Carolina  
and  
The Wildlife Resources Department of South Carolina

This agreement is made and entered into between the Clemson Agricultural College (hereinafter referred to as the College), and the Wildlife Resources Department of the State of South Carolina (hereinafter referred to as the Department), for the purpose of providing the basic plans and foundation for cooperation between themselves, and in combination with the U.S. Fish and Wildlife Service.

To achieve this basic purpose, the agencies hereto do mutually covenant and agree to the following:

The Department and the College Mutually Agree:

1. To develop, and maintain on an up-to-date basis, a management plan which shall include among other necessary and technical details:
  - a. Description and purpose of each project.
  - b. Delineation of lands included in the project and/or projects.
  - c. Schedules for restocking the management areas with species of wildlife, if any.
  - d. Methods for harvesting game, if any.
  - e. Work schedules designed for research and wildlife propagation.
  - f. A detailed statement of the annual budget showing the proposed expenditures, and the contributions of the cooperative and of the U.S. Fish and Wildlife Service.
2. That the plan will be reviewed and evaluated in detail...
3. That to the extent desirable and necessary the plan and revisions therein will be made in consultation with representatives of the U.S. Fish and Wildlife Service.
4. That a project leader shall be selected jointly...
5. That the project leader shall reside at the College...

6. That the project leader shall furnish such plans and reports as may be required by the Department, the College, and the U.S. Fish and Wildlife Service.

The Department Further Agrees:

1. To establish and maintain a wildlife management project on that part of the College lands lying between the confluence of Twelve-Mile and Keowee River, and on such other College lands as may be available.
2. To furnish such accounting records...
3. To patrol the area for trespassers and prosecute violators of game laws.

The College Further Agrees:

1. To designate as a wildlife management area that part of the College lands lying between the confluence of Twelve-Mile and Keowee River which is not already being used for research or other purposes...
2. To provide office space for project leader.
3. To support the wildlife projects...
4. To assign the right to control all hunting in the project areas to the Department.
5. To permit only such hunting/trapping on the projects areas as is set forth in the management plan.
6. To permit the Department to create and maintain forest openings to be planted and developed for the game...
7. To permit the Department to construct buildings, roads, etc., that are considered necessary in the operation of the project...

Signed February 17, 1956, by the Clemson Agricultural College of South Carolina and the Wildlife Resources Department of South Carolina.

# Appendix G

## Wildlife, “Little Things” & the Forest

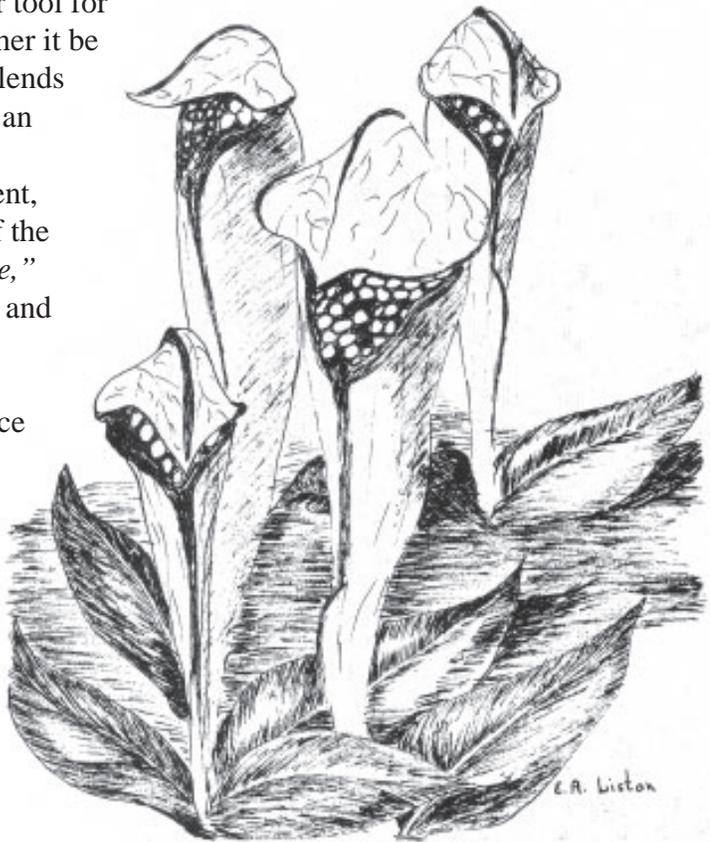
*You can find the spirit of the wilderness on the edge of a little creek, beside an oak in the pasture, in a spider web, listening to a robin’s song or even peering into the delicate petals of a flower.*

– James W. Kimball

Individuals relate to wildlife. What better tool for an interpreter than a living species, whether it be deer or groundhog or bluebird? Wildlife lends itself to interpretive programs serving as an indicator of such diverse thoughts as environmental quality, habitat management, and seasonal change. Wildlife is a part of the total Forest story, “*In the Face of Change*,” and provides endless interpretive themes and concepts.

The upcountry of South Carolina was once a diverse habitat for many wildlife species in the years preceding settlement. Among the original animal inhabitants were the American bison, elk, panther, and wolf. Historian J.H. Logan offers an insight into the area:

*At the period when hunters and cowdrivers first penetrated the Upper Country, there were considerable portions of it as luxurious in grass and flowers as any prairie of modern times. In the cane breaks...and on the extensive prairie ridges, the early pioneers and hunters found large herds of buffaloes and elk...At the earliest period of emigration into the upper country, an old pioneer from Virginia often counted a hundred buffaloes grazing on a single acre of ground... (Logan, 1859: 11,6,15)*



Several predators, including wolves, cougars, and wildcats, preyed upon the vast herds of buffalo, elk, and deer. Most of these predators are now gone, but their legend lives on. Early naturalist John Lawson, in 1709, remarked that the cougar or panther is "...the greatest Enemy to the Planter of any Vermine in Carolina." (Lawson, 1709:123) Logan painted a far more graphic interpretation of these predators: "...panthers, wolves, bears, catamounts, and wild cats prowled in incredible numbers in the swamps and thickets, making night hideous with their cries." (Logan, 1859:22)

With colonization, the majority of these animals disappeared from the state, and a piece of magnificent wildlife heritage was lost.

Today, the Clemson Experimental Forest contains a varied and an outstanding wildlife resource. In addition to providing habitat for several game species, the 6,400 acre tract of land between the junction of the Keowee and Twelve Mile Rivers is a wildlife sanctuary. This sanctuary was established through a joint research agreement between the State Wildlife Resources Department and Clemson University. (Appendix F)

Wildlife management entails numerous experimental practices in determining the optimum method of managing individual species. A major portion of the management of the Forest encompasses wildlife and its role in forest ecology.

Forest lands in the recent years, especially the numerous beaver ponds, are attracting a varied number of waterfowl which are seeking prime winter habitat and food supplies. These waterfowl tell the story of biological rhythms or migrations. Migration is a timeless and thought-provoking story, as it functions in the process of life.

Life is all living things, interwoven in a patchwork design of intricate interrelationships. These relationships of life, whether man with man, man with nature, or nature with nature, are valuable for the very existence of one another and provide benefits of which most are totally ignorant. As John Muir stated in regards to the relationships of life "...Everything is hitched to everything else. Each for all and all for each." (Wolfe, 1945: ix)

Through understanding the relationships present in everyday life, aptly displayed through wildlife, man can better comprehend his role on earth and the role of all fellow living things. Understanding the simplicity and beauty, or the complications and ruggedness of various life cycles, can lead individuals to appreciate this phenomenon referred to as "life."





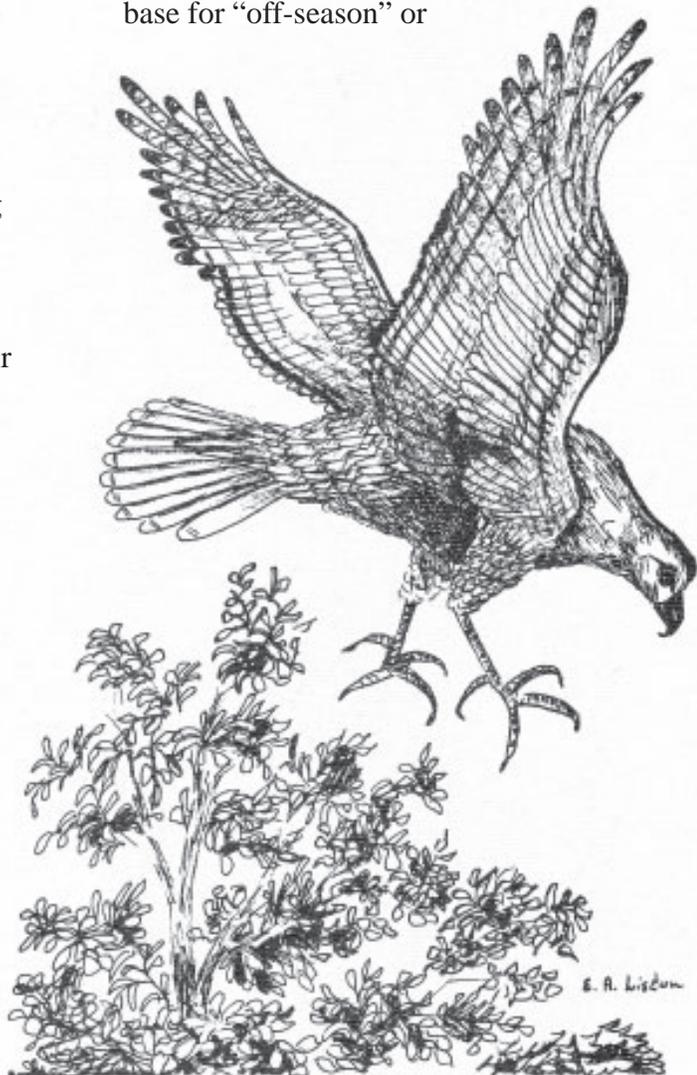
One of the more intriguing cycles of life is the unusual migration of the Monarch butterfly. A Monarch is one of the priceless “little things” of nature. It resides with the praying mantis, the bagworm cocoon, and the pink lady slipper in notoriety. “Little things” are the essence of all life, and perception of these often-taken-for-granted elements provides an invaluable ingredient for understanding all natural systems.

The Forest is a home for more than deer and beaver, wild turkey and red-tailed hawk, woodcock and squirrel. Within the Forest reside more “little things” than are conceivable. These provide a base for “off-season” or

“short-lived phenomena” interpretation and expand the concept “To every-thing there is a season.” For example, bridging the gap between the Clemson Experimental Forest and a Monarch butterfly provides a step toward appreciation for all living things and their place in the “web of life.”

A narrative, “To everything there is a season,” is presented within this appendix as an example of an interpretive presentation utilizing the “little things” of the Clemson Experimental Forest. It is presented to demonstrate the endless possibilities for interpretation that exist on the Forest and within its resources of land, water, and wildlife.

Wildlife, “Little Things”, and the Clemson Experimental Forest are a continuing story of the Forest, *In the Face of Change*.



# “To Everything There is a Season”

“To everything there is a season...” is a story of the “little things” in the realm of natural systems. The objectives of this interpretive program are:

- (1) to provide the visitor with the basic relationship between the life cycle of the Monarch butterfly and the Clemson Experimental Forest.
- (2) to promote an understanding of the significance of a life cycle during the four seasons.
- (3) to create an appreciation for the seldom understood “little things” in the world of nature.
- (4) to present an entire system approach, rather than disjointed parts of a life cycle system.
- (5) to instill within the visitor the challenge to further his personal knowledge and to identify with more than meets the eye in the natural world.

## The Theme

*Live in each season as it passes; breathe the air,  
drink the drink, taste the fruit and resign yourself to  
the influence of each. Let them be your only diet,  
drink and botanical medicines. Be blown on by all  
the winds. Open all your pores and bathe in the  
tides of nature, in all her streams and oceans, at all  
seasons.*

– Henry David Thoreau

In the realm of modern man, everything moves faster and faster with each rise and set of the sun. Many individuals have lost identity through this maddening technological race that can only end in loss of purpose or destruction. Having lost identity and the ability to identify with oneself, individuals have lost sight of the “little things” that make life so precious.

The “little things” like the sound of rain on a tin roof, the budding of the dogwood in spring, the egg case of a praying mantis hidden on the thorny stem of a rose bush, or a glimpse of the brightly-colored Monarch butterfly, gliding on the wind currents of the seasons, are remarkable interpretive stories.

One such story is the intriguing life cycle of the Monarch. Through the changing seasons, this fascinating story weaves a beautiful life cycle which aptly demonstrates that “To everything there is a season. . .”.

The Monarch, appropriately named for its superiority over the butterflies of North America, is a dazzling butterfly in size and brilliant color. In a time when so many wildlife and butterfly species are on or may be destined for the nation's Endangered Species list, the Monarch is quite abundant.



Often called the “milkweed butterfly,” the Monarch is usually found in abundance where milkweed ranges. Unfortunately, the Clemson Experimental Forest is too far south to contain milkweed. However, the most unusual aspect of the Monarch is its extraordinary migration, in which the Forest lands lie in a direct path. This migration is a part of the Monarch’s life cycle and is seasonal, occurring in the Fall and Spring. For this reason, the sighting of a Monarch or a mass of the giant orange- black forms is a short-lived event of a most fascinating nature.

The Monarch’s life cycle is delightfully perceived through the changing seasons. As there is beauty in every living thing, so then “to every-thing there is a season. . .”.

# Winter

Days are short of sunlight in the Clemson Experimental Forest during winter. Pine boughs hang low wearing sheens of ice crystals which glitter in the shafting rays of sun. The winds of the North blow upon the foothills with a ferocity, leaving a crystalline atmosphere in their passing.



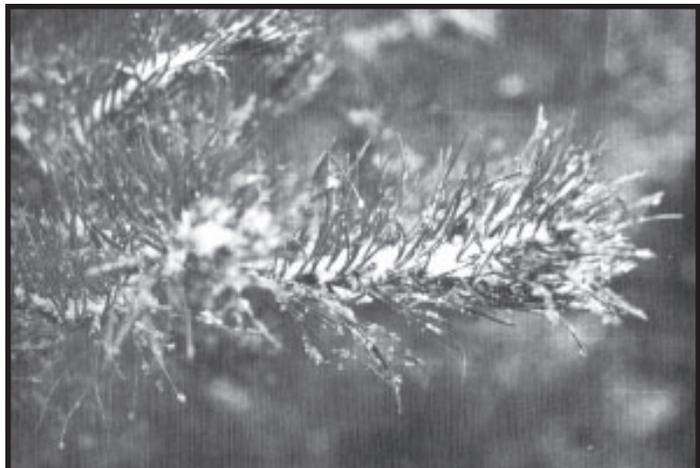
Winter is bitterly cold, or at times almost pleasant, in the Forest. Periods of rain and storm, or an occasional flurry of snow, serve to entertain or perhaps, increase wrath. For winter is a fickle season, unpredictable and provocative in mood, and forever defying continuity.

Monarchs had passed through the Forest in the fall; now, the intrepid travelers are warmed by the sunny skies of Florida where they rest in a semi-dormant

state, high up on the branches of trees. Monarchs are not too different from some humans, preferring to winter where it is warm, and summer where it is cool.

Winter is a much needed season. It allows the earth and the vegetation an opportunity to rest, to store up energy for the spring. Very few people venture outdoors during the worst of winter, and very few find the beauty of the Forest that is displayed during the most dreaded of all nature's seasons. Winter allows the woods to be more open; consequently, one can see further and the mountain ranges in the distance appear especially near during wintertime.

The winds of winter are whipping across the foothills and the sky is the crystalline blue of winter days, cold with frost and snow, in the Forest. Sunsets are much richer and deeper in color with winter upon the lands, and the realization that spring is not far in the future, makes the colors vary more in tone. With spring the Monarch will be moving North, and the lands of the Clemson Experimental Forest lie in the path of nature's traveler.

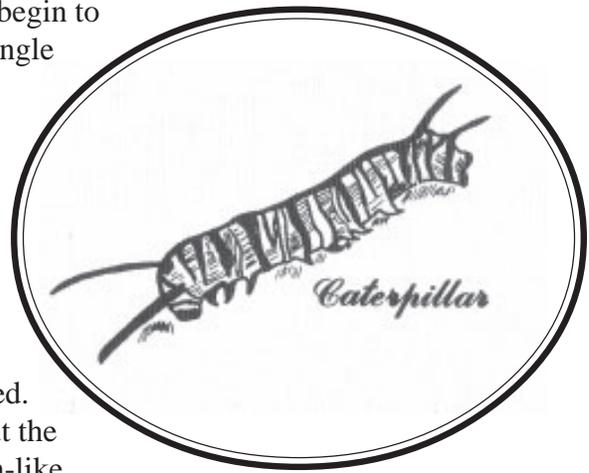


# Spring

The warmth of the spring sun takes a while to ease the chill of winter in the foothills. Gradually, the first green leaves and grass begin to change the scene from the brownish and grey hues of winter to the shaded and shadowy variations of green, herald crier of spring. Hardwoods in the Forest regain their leaves, with the serviceberry budding first in mid-March and evergreens taking on a deeper, richer shade.

Monarchs, having disbanded from winter quarters, begin to move northward, individually. The flight of these single black and orange butterflies is swift with an air of urgency. One may catch a glimpse of one, or perhaps several, over a period of days, winging their way north through the Forest to the range of milkweed.

It is especially an urgent flight for the female Monarch. She must lay her eggs on the milkweed. For upon the leaves of this plant her larvae must feed. The egg the female lays is an exquisite object, about the size of the head of a pin and having an unusual gem-like appearance.



Depending upon temperature, the egg takes anywhere from 3-12 days to develop. As it nears hatching, the egg turns dark grey in color and the larva or caterpillar emerges, to feed upon the leaves of the milkweed. Over a period of two or more weeks, the caterpillar's home is the milkweed plant, and the voracious appetite of the caterpillar leaves the plant ragged. Eventually, the caterpillar leaves the milkweed in search of a suitable location for the intricate process of spinning a jade-green chrysalis.

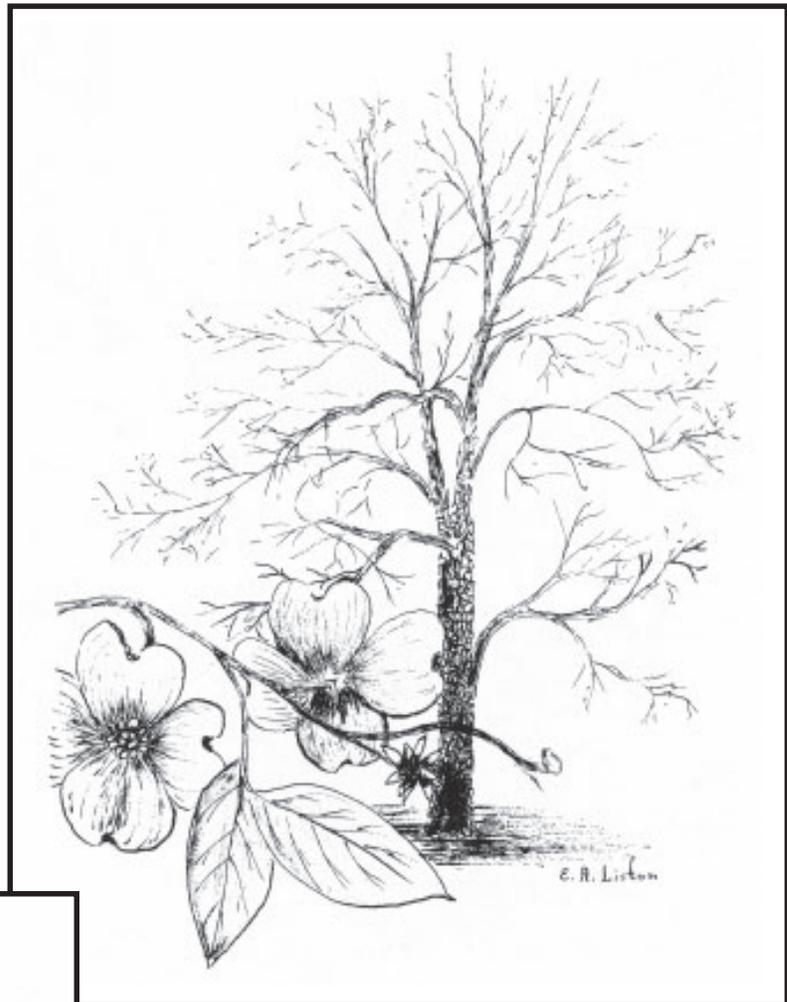
From this pupal stage of development will emerge the adult monarch butterfly, possessing a quite poisonous nature as a result to the caterpillar's feeding on milkweed leaves. Many generations are produced this way during the spring months.

Spring days are warm and occasionally sprinkled with showers, as life begins to regain the pageantry of color and excitement that lay dormant during winter. Many have visited the Forest to enjoy the spectrum of wildflowers and the emergence of greenery, during the spring. Slowly, the days of spring blend into the season of summer, favored in the minds of many.

# Summer

Rainbow filled days of summer bring many people to the Forest to wander randomly through the forest shade, and relax along the shores of Lake Issaqueena.

“Living is easy,” playful and lazy during the summer months in the Clemson Experimental Forest. In other parts of the country, the Monarchs, having reached the northern climates of Canada and the Great Lakes country, mate and begin to complete the story with the most fascinating part of their existence – the great migration southward. Beginning in late summer in northern regions,



the migration will not touch the lives of man in the Forest until early fall.

Nevertheless, one waits with the hidden realization that a magnificent spectacle will soon grace his sight and arouse curiosity and wonder in his mind and heart. While waiting, the loveliness that is the landscape of the Forest provides many opportunities for ventures of enjoyment and recreation in a natural setting.

# Fall

Nothing rivals the rainbow of shades, shadows and hues of color that signal the spectacle of autumn in the Clemson Experimental Forest. Oranges, purples, yellows, reds, and other varied tones transform from the green covering into a mosaic of splendor. The foothills are beautiful in the fall, perhaps not as impressive as the mountains, but still colorful in their cloak of autumn finery.

If one is walking the trail at “Treaty Oak” or wandering at will in the Lake Issaqueena Recreation Area, the sight of a Monarch, singly, or more often, in mass, with wings spread, gliding, soaring and dipping on the breezes of fall is unforgettable. The Monarchs sweep through the wind gaps of the Pisgah range, and often the winds carry them through the Forest or along the shores of Issaqueena or Hartwell.



Triggered into migration by the approaching cold temperatures of the North, the mass of brilliant orange and black Monarchs move southward unhurriedly. Uncanny in their ability to feel an approaching cold front, Monarchs capture the hearts of all as they lazily drift to the warmer climates of the South. Amazingly, they are seldom molested during their flight as birds and other predators have long known the repugnant taste of the giant butterflies.

Almost unnoticeably, the days of autumn blend into winter. There is frost on the ground and a hint of crisp cold in the winds. As winter approaches, the cycle will repeat itself as it has been doing for the past hundreds of years. It is a delicate balance between Monarch and milkweed, and a life cycle continuous through time. The Clemson Experimental Forest is but a resting place for the traveling Monarchs, but it welcomes the Monarchs' passing as a signal of nature's seasons, as it has done throughout time.

*All things belonging to the earth will never change – the leaf, the blade, the flower, the wind that cries and sleeps and wakes again, the trees whose stiff arms clash and tremble in the dark, and the dust of lovers long since buried in the earth – all things preceding from the earth to seasons, all things that lapse and change and come upon the earth – these things will always be the same, for they come upon the earth – these things will always be the same, for they come up from the earth that never changes, they go back into the earth that lasts forever.*

– Thomas Wolfe



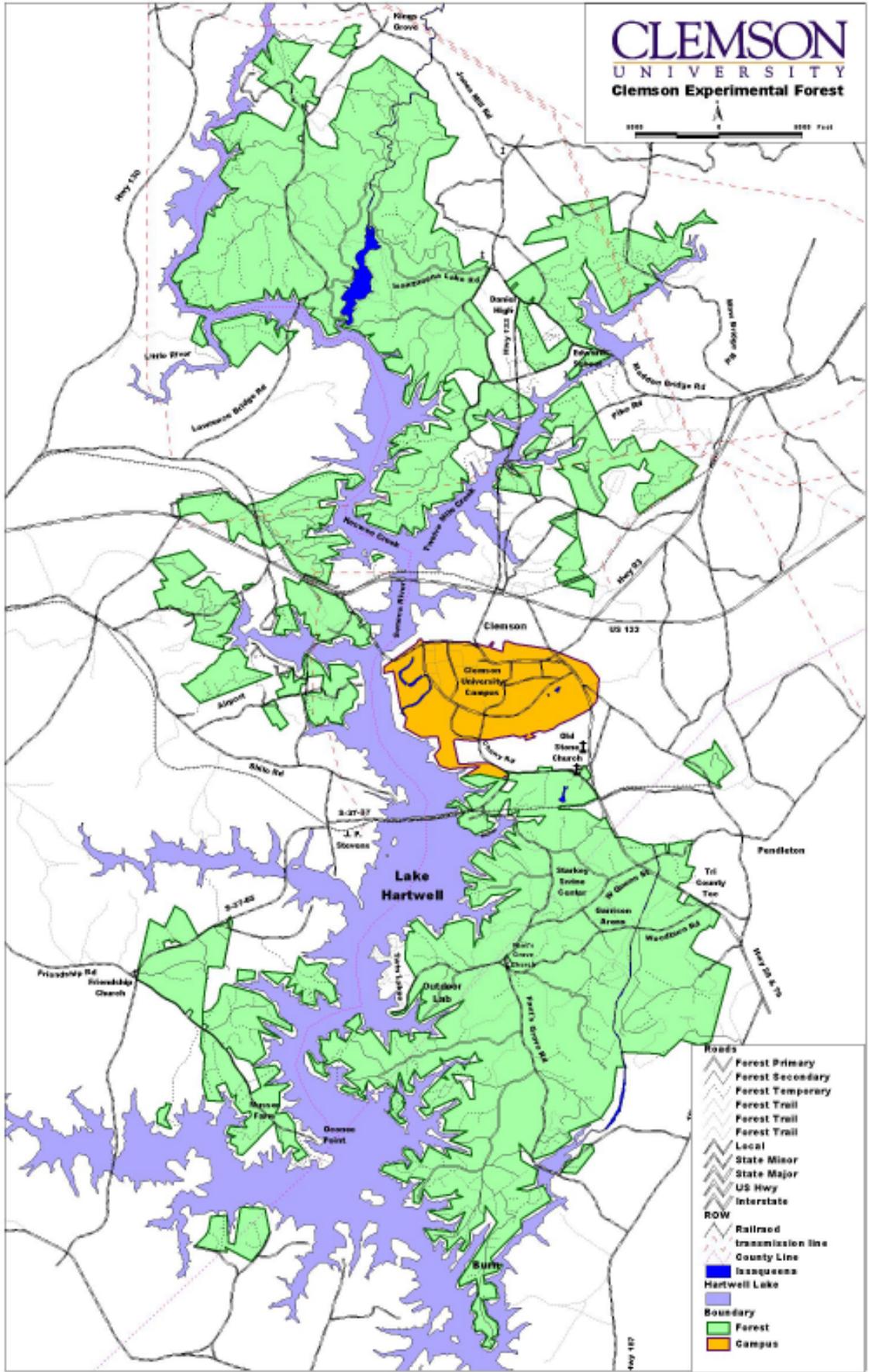
*The past is but the beginning of the beginning.*

*– H. G. Wells*

# CLEMSON UNIVERSITY

## Clemson Experimental Forest

0 1000 2000 Feet



- Roads**
- Forest Primary
  - Forest Secondary
  - Forest Temporary
  - Forest Trail
  - Forest Trail
  - Forest Trail
  - Local
  - State Minor
  - State Major
  - US Hwy
  - Interstate
- ROW**
- Railroad
  - Transmission line
  - County Line
- Isaqueena  
Hartwell Lake
- Boundary**
- Forest
  - Campus

May 1977