

EXCERPTS FROM

ARCHAEOLOGICAL SURVEY AND EVALUATION  
EAST FORK HYDROELECTRIC PROJECT  
(BEAR CREEK LAKE, WOLF CREEK LAKE, TENNESSEE CREEK LAKE)  
JACKSON COUNTY, NORTH CAROLINA

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Archaeological Survey and Evaluation  
East Fork Hydroelectric Project  
Jackson County, North Carolina

## INTRODUCTION

The East Fork (Bear Creek Lake, Wolf Creek Lake, Tennessee Creek Lake) Hydroelectric Project, which is located in Jackson County, North Carolina, is scheduled for relicensing in the year 2006 (FERC project number 2698; ER 99-8203; Clearinghouse 00-E-0000-0483). Under the Federal Power Act (FPA), the Federal Energy Regulatory Commission (FERC) has exclusive authority to license nonfederal power hydroelectric projects located on navigable waterways. The licensing or amendment of the license of a hydroelectric project may trigger the environmental review process governed by the National Environmental Policy Act (NEPA). The NEPA process is intended to help make decisions that are based on an understanding of environmental consequences, and take actions to protect, restore, or enhance the environment. Section 106 of the National Historic Preservation Act (NHPA) requires that the effect of an action, such as issuance of a license for hydroelectric project) take into account the effect of its actions on historic properties and to provide the Advisory Council on Historic Preservation (ACHP) with a reasonable opportunity to comment. Historic properties are those that are included in or determined eligible for the National Register of Historic Places (NRHP).

This technical report has been prepared for Duke Power in Charlotte, North Carolina, by Legacy Research Associates, Inc. (Legacy) located in Durham, North Carolina. This report details the Phase 1 archaeological survey along the shoreline of Bear Creek Lake, Wolf Creek Lake, and Tennessee Creek Lake on the East Fork of the Tuckasegee River in Jackson County, North Carolina (Figures 1 and 2).

This work was conducted in support of FERC relicensing of the East Fork hydroelectric plants. Nantahala Power and Light (NP&L), a division of Duke Energy Corporation, is the FERC licensee for these projects.

An archaeological survey of the project area was conducted by Deborah Joy, Warren Carruth, Amy Carruth, and Andrew Hill of Legacy on February 6, 7, 8, and 12, 2001. Survey work consisted of surface reconnaissance and systematic shovel testing within the archaeological study area. The Study Plan for the archaeological survey appears in Appendix A.

The primary goal of the archaeological survey was to discover, inventory, and evaluate the significance of archaeological sites located along the shoreline and within the drawdown areas of Bear Creek Lake, Wolf Creek Lake, and Tennessee Creek Lake. The inventory of archaeological sites was structured to provide an assessment of current site conditions, a determination of ongoing factors affecting site condition, and an evaluation of the preservation potential of each site.

Specific goals of the survey that were stipulated in the scope of work include the following.

1. Assess the effects of erosion resulting from wave action and annual drawdowns on any sites identified during the survey.
2. Provide a preliminary assessment for the potential of sites located within the floodpool and recommendations for surveys in the floodpools during planned drawdowns.



Figure 1. Location of Bear Creek Lake.

Figure 2. Location of Wolf and Tennessee Creek Lakes.

## PHYSICAL ENVIRONMENT

Jackson County is located in the southwestern part of North Carolina. The county is bordered on the north by Swain County, on the east by Haywood and Transylvania counties, and on the west by Swain and Macon counties. Oconee County, South Carolina borders it on the south. Elevations across the county range from 1,850 feet to 6,450 feet above mean sea level (AMSL).

Jackson County lies in the Blue Ridge Mountain physiographic region. The terrain varies from nearly level floodplains to almost vertical rock cliffs. The physiography of the county is high, intermediate, and low mountains, rolling hills, narrow valleys, floodplains, and stream terraces (Sherrill 1997).

The archaeological survey study area is located in the “intermediate mountain landscape” (Sherrill 1997). The intermediate landscape ranges from 3,500 to 4,800 feet. It is the most extensive landscape in the county and consists of well drained to excessively drained, gently sloping to very steep soils on side slopes and ridges. Very deep, well drained or moderately well drained gently sloping to very steep soils are found in coves and drainageways.

The county is mostly in the Tuckasegee River watershed. The study area is located along the East Fork of the Tuckasegee River. Bear Creek, Wolf Creek, and Tennessee Creek lakes were created in the early 1950s.

The most recent soil survey for Jackson County (Sherrill 1997) identifies three soil associations in the study area: Plott-Edneyville-Chestnut-Cullasaja; Cleveland-Rock Outcrop-Chestnut; Chandler-Fannin-Cashiers.

Plott-Edneyville-Chestnut-Cullasaja: loamy soils that formed in material weathered from high-grade metamorphic rocks, colluvium, or alluvium and areas of rock outcrop.

Cleveland-Rock Outcrop-Chestnut: loamy soils that formed in material weathered from high-grade metamorphic rocks, colluvium, or alluvium and areas of rock outcrop.

Chandler-Fannin-Cashiers: loamy surface soils and a clayey, loamy, or sandy subsoil that formed in old and recent alluvium or colluvium along the major streams.

For the most part, soils types along the East Fork of the Tuckasegee River are mapped as Chandler Series, Cleveland Series, Edneyville Series, and Udorthents.

Chandler Series consists of very deep, excessively drained, moderately rapidly permeable soils. These soils have been formed in saprolite weathered from high-grade, mica-rich, metamorphic rocks at intermediate elevations on ridgetops and side slopes.

Cleveland Series soils are shallow, excessively drained, and moderately rapidly permeable. They formed in saprolite weathered from high-grade metamorphic rocks on ridgetops, head slopes, and side slopes at intermediate elevations.

Edneyville Series soils are very deep, well drained, and moderately rapidly permeable. The soils formed in saprolite weathered from high-grade metamorphic rocks on ridgetops and side slopes at intermediate elevations.

Udorthents consists of areas of altered natural soil. The soil has been excavated or filled and is generally well drained or moderately well drained. The slope ranges from nearly level to very steep.

The following environmental description of Jackson County has been extrapolated from the recent soil survey (Sherrill 1997). The county is largely rural and wooded. In the 1880s railroads opened the area to large-scale mining and timber operations. The county was a large producer of kaolin and, to a lesser degree, corundum, olivine, gold, copper, nickel, and chromium. The chestnut trees were decimated by blight in the 1930s but timbering continued into the 1970s. In the 1950s textiles began to play a major role in employment opportunities as agriculture dropped.

Agriculture in the region today is concerned with crops such as hay, tobacco, cabbage, Christmas trees, landscape plants, and corn. Pasturelands have been converted in recent years for growing ornamentals. The timber and mining industries remain important to the county. Much of the population is concentrated along the Tuckasegee River valley and its tributaries or in coves in the mountains.

## **PROJECT AREA DESCRIPTION**

The East Fork Hydroelectric Project includes Cedar Cliff Lake, Bear Creek Lake, Wolf Creek Lake, and Tennessee Creek Lake Developments on the East Fork of the Tuckasegee River and its tributaries. This archaeological survey is concerned with the developments at Bear Creek Lake, Wolf Creek Lake, and Tennessee Creek Lake.

The Bear Creek Lake Development has one dam at river mile 4.8 and impounds water in the Bear Creek Lake. The reservoir has a surface area of 476 acres (193 ha) with approximately 23.5 km (14.5 miles) of shoreline.

The Tennessee Creek Development contains two dams and two reservoirs. The East Fork Dam that impounds water in the Tennessee Creek Lake is on the East Fork of the Tuckasegee River at river mile 10.9. This reservoir has a surface area of 40 acres (16 ha). Its shoreline covers approximately 3.8 km (2.4 miles). The Wolf Creek Dam, impounding water in Wolf Creek Lake, is located on Wolf Creek 2.7 km (1.7 miles) upstream from the confluence of Wolf Creek and the East Fork of the Tuckasegee River. Its surface area is 183 acres (74 ha) with 10.6 km (6.6 miles) of shoreline.

Much of the land along the shore of all three reservoirs is steep and rocky. In places where the bedrock is not exposed, the landforms are suffering from erosion exacerbated by wakes caused by recreational boats. On the other hand, some level cove areas exhibit a good deal of silt deposition. Numerous waterfalls of varying heights appear at some of the creeks feeding the reservoirs. There is limited development around the reservoirs consisting of private homes ranging from small cabins to large expensive residences. Boat launches facilitate the recreational usage of the reservoirs by fishermen and boating enthusiasts.

## **PREVIOUS ARCHAEOLOGICAL RESEARCH**

The University of North Carolina, under the direction of Joffre Coe, conducted extensive surveys in the 1960s in the Appalachian Summit region during the Cherokee Project. This archaeological study focused on developing a prehistoric cultural chronology and determining the origins of Cherokee culture in western North Carolina. These investigations included the Tuckasegee site (31Jk12) in Jackson County.

In the 1970s and early 1980s surveys and excavations were conducted in the area by archaeologists at Western Carolina University (Dorwin et al. 1975; Collins and Eblen 1978), Appalachian State University (Ayers et al. 1980; Purrington 1981, 1982; Loucks 1982; Senior 1981), the University of Tennessee (Bass 1977), and the Archaeology Branch of the North Carolina Division of Archives and History (Robertson and Robertson 1978). Moore (1986), Riggs (1988), Keel (1976), and Coe (1974) conducted important work on Cherokee sites among others.

Archaeology on United States Forest Service (USFS) land represents a large portion of published work for Jackson County (Harmon and Snedeker 1988; Dyson and Snedeker 1991a & b, 1992, 1993, 1994; Burchett and Snedeker 1994a & b; and Preston et al. 2000). Other recent work within Jackson County includes surveys by Shumate et al. (2000) and Brown and Rogers (2000).

## **PREHISTORIC BACKGROUND**

The Paleo-Indian period is the term used to describe the earliest human occupation of North America for which we have firm evidence. Paleo-Indian culture consisted of small nomadic bands, subsisting via a generalized hunting and gathering regime (Purrington 1983). Clovis or Clovis-like projectile points, characteristic of this early period, have been recorded in many upland locations in North Carolina. These fluted projectile points are known only from surface finds in this area, but by comparison with similar materials from other regions of the country, they are assumed to date to 8,000 BC and earlier. Although archaeological evidence for this period is sparse, it has been postulated that an increasingly sedentary culture probably based upon seasonal exploitation of different environmental zones within broad territories gradually replaced the former nomadic, hunter-gatherer existence. This lengthy transition occurred between 8,000 BC and 500 BC and is termed the Archaic period. Between the Early and Late Archaic periods there are some indications of a shift in settlement from upland sites to floodplain locations (Bass 1977).

Hardaway and Dalton projectile points are associated with late Paleo-Indian and Early Archaic periods (Coe 1964). As with the Paleo-Indian period, no stratified Early Archaic sites have yet been found in the mountain region of North Carolina, but such sites are known from the uplands of adjacent eastern Tennessee (Chapman 1977).

A number of different projectile point forms are associated with the Archaic period in the mountain region. Kirk and LeCroy Phases have been defined for the Early Archaic. Stanly and Morrow Mountain Phases represent the Middle Archaic, and the Savannah River Phase marks the Late Archaic (Purrington 1983).

The introduction of ceramics marks the beginning of the Woodland period (700 BC to 1000 AD). The Swannanoa Phase (700-300 BC) was the initial Woodland occupation of the Appalachian Mountains. Sites are often found in the fertile bottomland, but also occur in upland situations. Although the data is spotty, there is good evidence that the focus of settlement moved increasingly to the bottomland during the succeeding Pigeon (300 BC-AD 200) and Connestee (AD 200 -1000) Phases (Keel 1976). Presumably this reflects the growing dependence upon horticulture that continued throughout the Woodland period. By the Late Woodland and early Mississippian periods larger sites are found,

indicating the use of villages that were occupied and abandoned repeatedly over a long duration (Dickens 1976; Purrington 1983).

The Mississippian period (1000-1650 AD) defines the Late Prehistoric Era. Increasing dependence on corn agriculture supplemented by hunting and gathering provided a relatively stable and plentiful food supply that supported an increased population. This in turn led to increasing social complexity and large centrally organized chiefdoms.

#### **LATE PREHISTORIC/PROTOHISTORIC BACKGROUND**

After AD 1450 native people who are historically known as the Cherokee (Hudson 1986) populated the North Carolina Appalachian Summit region. Their culture is known as Qualla. One known Cherokee town in the project vicinity is the Tuckasegee site (31Jk12). This is an eighteenth century town that first appears on the George Hunter map of 1730. It is located just below the forks of the Tuckasegee River (Keel 1976).

The most diagnostic attribute of the Qualla culture is their ceramic tradition. Qualla ceramics are characterized by rectangular complicated stamped, check stamped, and plain surface treatments and burnished vessel interiors. The lithic technology consists of small triangular projectile points, flake scrapers, side scrapers, stone drills, and gunflints. Ground stone celts, pipes, discs, and chunky stones are also part of the Qualla culture. The cultural material assemblage of the late Qualla includes European trade goods, typically made of metal and or glass.

The Native American population of western North Carolina was severely affected by the arrival of Europeans. Exposure to Old World diseases decimated the population and settlement by whites continually encroached upon Indian territories. Finally, the Indian removals of the 1830s cleared all but a fraction of the remaining indigenous population.

## HISTORIC BACKGROUND

The earliest known European explorers to reach the mountain region of North Carolina probably visited the area that is now Jackson County. The expeditions of Hernando de Soto in 1540 and Juan Pardo in 1566 are both thought to have passed through the region (DePratter et al. 1985; Hudson et al. 1984). It was not until after 1670, when the Spanish relinquished their claims, that the British began settling the interior of North Carolina.

The Treaty of Tellico in October 1798 opened a portion of present-day Jackson County to the white settlers. The boundary, the Meigs-Freeman Line, was along the northern shore of the Tuckasegee River. In 1819, additional treaties gave most of the land in Jackson County to European-Americans.

The first European settlers became involved in extensive trade relations with the Native American inhabitants of the area. Traders of both cultures used long established trails that were widened and improved as time went by. Trading posts appeared, such as Foster's station about two miles east of Sylva in ca. 1800. As with much of the region, settlers in Jackson County were predominantly of Scotch-Irish descent, along with Pennsylvania Germans, Virginians, and North Carolinians. Permanent European settlement in this area was limited prior to the American Revolution.

Jackson County was formed from portions of neighboring Macon and Haywood counties in 1851, and named for former President Andrew Jackson. Sylva became the county seat in 1913.

The Treaty of New Echota in 1835 brought about the Cherokee Removal in 1838, though some chose to remain. They are now known as the Eastern Band of the Cherokee Indians (EBCI) centralized in Cherokee located in on the western edge of Jackson County. In 1930, Congress finally agreed that members of the EBCI were entitled to citizenship of both North Carolina and the United States.

## HISTORIC SETTLEMENT OF THE PROJECT AREA

There were few white settlers along the rugged and mountainous Tuckasegee River and its tributaries. The earliest migrated to the area after the Cherokee Removal of 1838. Over time the property changed hands until the early 1950s when NP&L began acquiring the land for their hydroelectric projects (Appendix B). Most people were eager to sell because the land was too steep to be useful (Neal Prince, personal communication 2001). Some people did go to court in an attempt to gain more profit, but most were happy to take what they could get. The July 31, 1952 *The Sylva Herald* reported that full and fair prices were offered for the lands. It was said that court appraisers in the condemnation suits appraised the properties much lower than NP&L had offered.

At the time NP&L acquired land along the Tuckasegee River only a few structures were in the path of the rising lake waters. A review of the East Fork Property maps depicts the mid twentieth century settlement of the project area (Table 1). Archival photographs (ca. 1952) on file at the Duke Power Franklin office depict structures in the project area and provide general views of the landscape prior to inundation (Figures 3-6).

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· see Background Research Methods page 14



Figure 3. General view of Bear Creek during land clearing in 1952.



Figure 4. Another view of Bear Creek during land clearing in 1952.



Figure 5. Strikeleather, Nichols, Gennett house on Bear Creek in 1952.



Figure 6. Strikeleather, Nichols, Gennett property on Bear Creek in 1952.

Table 1. Summary of property owners and structures prior to NP&L acquisition.

Bear Creek Reservoir

Previous owner	Description
George Coward	Stone Cabin south of Creek
Dewey Parker	Logging Camp
Strikeleather, Nichols & Gennett	Mica Mine, Mica pit
Strikeleather, Nichols & Gennett	3 houses, a barn, & a crib
S. A. Ashe	barn, crib, residence, & unlabeled structure
Marion Ashe	Cemetery
Carl Crawford	House & Spring, 2 barns & crib
Orville Middleton	Cemetery
Stuart-Van Alen?	Structure at junction of Tuckasegee & Neddie Creek

Tennessee Creek Reservoir

Previous owner	Description
H. E. Battle	Barn & House south of Tennessee Creek
M. D. Nicholson	Barn & House south of Tennessee Creek

Wolf Creek Reservoir

Previous owner	Description
L.E. Owen	House and barn
J.O. Shelton	House north of unnamed branch
Cemetery	Cemetery
Baptist church	Church
unidentified	House and barn east of wolf creek
Unidentified	House north of wolf creek
Unidentified	House south of wolf creek
Unidentified	House and barn east of wolf creek
Methodist Church	Church
unidentified	School

LEGENDS OF THE PROJECT AREA

Many local mountain legends abound in the area. One of the more famous concerns the story of the origin of the cliff named Bonas Defeat. This 1,500-foot cliff overlooks the East Fork of the Tuckasegee River. (Note: The location of Bonas Defeat is indicated on Figure 2 due west of Tennessee Creek Lake.)

As the story goes, in the mid-1800s a man named Andrew Jackson Wood lived, hunted, and farmed in the area. He had a pack of hound dogs and used them to hunt deer, raccoon, and fox. During hunting season he kept them lean, hence the name “Boney” attached to one dog. According to legend, one day Wood and Boney were in the woods when Boney jumped a deer and gave chase. Wood tried to keep up but was soon outdistanced. When he finally came to the edge of a cliff, he looked down and saw his beloved dog, Boney, and the deer lying at the bottom of the cliff, dead. Wood named the cliff Boney’s Defeat but somehow in the ensuing years when maps were made, the name was changed to Bonas Defeat (Williams 1987).

## INDUSTRIES OF THE PROJECT AREA

### Mining

One of North Carolina's first kaolin mines was opened in 1888 in Jackson County on property owned by James and W. R. Cowan (Page 1973). The clay from this Hogrock Mine was transported to a factory in Dillsboro for processing. Though the distance from mine to factory was only seven miles, transportation was always a problem. This was solved by the construction of a processing facility at the mine, which included a company store and a United States Post Office. In the late 1800s other factories and mines were opened in the surrounding area due to the marketable quality of the clay. Local farmers hoped for a kaolin discovery on their lands, though others believed that growing crops would generate more income than the clay that might be buried beneath. In February of 1892 the Jackson Kaolin Company began operating in addition to the mine at Hogrock. Jackson County people wished for potters to locate in Sylva to alleviate the cost of shipping the clay. But by mid-July of 1892, the Jackson Kaolin Company was out of business and the kaolin industry, as a whole, was not prospering (Page 1973).

Some mines continued to operate successfully, such as the Hogrock Mine owned by the Harris Clay Company. This mine produced the highest quality kaolin in Jackson County. Heinrich Ries, the North Carolina State Geologist, described the workings there when he visited in 1896. Picks and shovels were used in the 50 to 125 feet deep circular pits. They did not go deeper due to danger of cave-ins, even though wooden cribwork was placed at the sides of the 25 foot diameter pits. A winch and boom, powered by a mule walking in a circle turning a drum upon which the cable was wound, brought the clay to the surface (Page 1973).

Miners were paid a wage of seventy-five cents per ten-hour workday, six days a week. Both blacks and whites were paid the same and lived and ate together. The existence of "company stores" insured that no one really made any money as they were constantly in debt with credit being continually extended.

In 1900, the only county in North Carolina producing kaolin was Jackson, with the greatest volume of clay being marketed in 1902. The ensuing years were up and down until a slump in 1907. By 1911, production of kaolin in Mitchell and Macon counties was surpassing that of Jackson County. The state geological report of 1926 lists zero production of Jackson County kaolin. Valuable deposits still existed but they were not cost effective to mine (Page 1973).

In the late 1860s, the first modern mica mine (Big Ridge) in North Carolina opened near the Jackson County line in Haywood County. In 1868 the Cox Mine was opened in Jackson County but closed shortly thereafter. Mines in neighboring counties prospered because Native Americans had exposed the veins of mica in prehistoric times. Jackson County had to start from scratch so was at a disadvantage from the beginning. By 1881, there was only one active mine and numerous abandoned ones. Families, as opposed to large companies, conducted much of the mica mining in Jackson County during the 1880s. The deposits were too small for an organized mining operation but rich enough to warrant exploration. The steep slopes made mining easier as the workers did not have to dig soil overburden and place it elsewhere; they simply shoveled it into wheelbarrows and threw it down the mountain. Picks and shovels were used to dig the mica, which was then separated into thin sheets with a wedge (Page 1973).

In 1897, Jackson County was known as the third largest mineral producer in North Carolina. However, the next few years brought financial difficulties and only a few mines were continuously operating by 1910. One of the more important mines in Jackson County at this time was the Jim Wood Mine on Wolf Creek (Pratt 1908:45-52). With the outbreak of World War I, aided by a new tariff on foreign mica, the Jackson County mica industry boomed. The war effort needed lenses for gas masks and road goggles, in

addition to view portals in tanks. A production peak was reached in 1920, but by 1925 no mica was being mined in Jackson County. The 1930s saw limited mica production, which it did not become significant until the advent of World War II. In the early 1940s North Carolina was the largest mica producing state with Jackson County number six in the state. A total of 94 mica mines were in operation at one time or another in the county, including 19 large ones producing the bulk of mica. By 1953, only one mica mine was still in business in Jackson County. The industry rallied in 1954 with the introduction of a Senate bill calling for the government to stockpile strategic minerals. This ended in 1962 and generally halted mica production in the state (Page 1973).

### Timber

The timber industry was always a significant economic factor in Jackson County and surrounding areas. After 1890, the industry saw large-scale timber operations as the need for lumber increased. Timber was used for local furniture production, housing, and western railroad ties. Many of the companies operating in North Carolina were from New York and other northern regions, where supply had been depleted (Shumate and Evans-Shumate 1998). By the 1920s, the timber boom was practically over because of the chestnut blight and the sad fact that most of the hardwoods had been harvested. A very limited industry took advantage of the natural disaster. Blight devastated practically all the chestnut trees in the county, but the dead trees provided a source of income to farmers for a brief period. The Sylva Paperboard Company used the wood for the preparation of acid extract.

The National Forest Reserve Act of 1891 and the Weeks Act of 1911 set aside many tracts of land as reserves. These include the Pisgah and Nantahala National Forests along with the Great Smoky Mountains National Park.

### Hydroelectric Power

In the early part of the 20<sup>th</sup> century, Alcoa (the Aluminum Company of America) developed hydroelectric projects in the western North Carolina mountains to serve its industrial needs in Tennessee. A subsidiary, Nantahala Power and Light Company, NP&L, was created in 1929 for the purpose of serving the mountain counties in both a residential and business capacity. This service came to Jackson County in 1933 with the construction of a 29-mile wood pole transmission line between Nantahala and Sylva. It was built initially to provide the Sylva Paperboard Company with electricity.

Because access to the mountainous region proved difficult, workers were trucked to work sites and materials were loaded onto packhorses or mules for the rest of the journey. Workers stayed at local farmhouses and compensated the families for their room and board. Using mules and hand tools, workers cleared the rights of way and set poles in the rugged areas.

In 1933 NP&L sold power to the Dillsboro and Sylva Electric Company, connecting the systems at the Sylva Paperboard Company substation. The following year, a line was extended from Highlands to Cashiers and two years later, to Sapphire. In 1939, a line was constructed from Sylva to Cullowhee to serve Western Carolina Teachers College. The Glenville line and Glenville plant (now called Thorpe) became a reality in 1940 and was an engineering achievement for its day.

With World War II, great quantities of aluminum were needed for airplane construction. For Alcoa to provide more aluminum they needed more power. Alcoa's solution was the Thorpe plant, which was the first hydroelectric plant to be completed in the South after President Roosevelt's call for all-out national defense. Under the leadership of John Edward Stirling Thorpe, an English born civil engineer and NP&L's first president, construction took 1,500 men working 24 hours a day, seven days a week for a total of 16 months. Thorpe was the first hydroelectric facility to use "fuse plugs", which are small dams at the spillway entrance designed to fail progressively in case of sudden floods (McRae 1992).

In early 1940, only ten Jackson County customers were served by electricity. Wartime industry increased this number to 1,500 customers by mid-1951 (*The Sylva Herald*, August 30, 1951). This increase required over 200 miles of rural distribution lines. The large work force needed for construction of these lines and plants added to the economic stability of the area. As the local people received electricity in their homes they began purchasing appliances, thus enhancing the economic and social progress of the county.

In 1950, Tuckasegee, a run-of- the-river plant, was built downstream from Thorpe. Shortly thereafter, the Korean Conflict was the impetus for more power plant construction along the East Fork of the Tuckasegee River. These plants, Cedar Creek, Bear Creek and Tennessee Creek, were built utilizing the rock fill, clay core design that had proven to be so efficient at the Nantahala plant. The first of these to be completed was Cedar Creek in 1952, encompassing the lower reach of the river. In 1954, this was followed by Bear Creek located two miles upstream. The Bear Creek reservoir extends to the tailrace of Tennessee Creek (plant constructed in 1955) and receives water from the Wolf Creek and East Fork reservoirs (McRae 1992).

NP&L bought out the Dillsboro and Sylva Electric Light Company in 1957, along with franchises to maintain systems in Dillsboro, Sylva, and Webster. On November 17, 1988, Duke Power Company purchased NP&L from Alcoa and made much needed improvements to some of the old systems. In 1991 the NP&L system was connected to Duke Power at Tuckasegee and in 1998, NP&L became a division of Duke Power.

## REFERENCES

- Ayers, H. G., L. J. Loucks and B. L. Purrington  
1980 Excavations at the Ward Site, a Pisgah Village in Western North Carolina. Paper presented at the 37<sup>th</sup> Annual Meeting of the Southeastern Archaeological Conference, New Orleans.
- Bass, Q. R. II  
1977 Prehistoric Settlement and Subsistence Patterns in the Great Smoky Mountains National Park. North Carolina Department of Cultural Resources, Division of Archives and History, Office of State Archaeology, Raleigh.
- Brown, Jonathan E. (ed.)  
1954 *Jackson County Public Schools 1853-1954*. North Carolina Education Association, Jackson County Unit of the Historical Committee.
- Brown, J. L. and A. F. Rogers  
2000 Archaeological Survey for the Proposed Fine and Performing Arts Center, Western Carolina University, Cullowhee, Jackson County, North Carolina. Western Carolina University, Cullowhee, NC.
- Burchett, Alain and Rodney J. Snedeker  
1994a Heritage Resources Survey for the Proposed Chattooga-Ellicott Community Association, Road Easement (H95-2), Compartment 35, Highlands Ranger District, Nantahala National Forest, Jackson County, North Carolina. On file, National Forests in North Carolina, Asheville.  
1994b Heritage Resources Survey for the Proposed Haywood Power and Light Right of Way (H95-1), Compartment 35, Highlands Ranger District, Nantahala National Forest, Jackson County, North Carolina. On file, National Forests in North Carolina, Asheville.
- Butler W.  
1987 Significance and Other Frustrations in the CRM Process. *American Antiquity* 52(4): 820-829.
- Chapman, J.  
1977 Archaic Period Research in the Lower Little Tennessee River Valley – 1975: Icehouse Bottom, Harrison Branch, Thirty-Acre Island, Calloway Island. *Report of Investigations* No. 18, Department of Anthropology, University of Tennessee, Knoxville.
- Coe, J. L.  
1964 The Formative Cultures of the Carolina Piedmont. *Transactions of the American Philosophical Society*, N.S., Vol. 54 (5).  
1974 *Archaeological Overview, Great Smokies Region*. On file, Research Laboratories of Anthropology, University of North Carolina at Chapel Hill.

- Collins, S. M. and M. J. Eblen  
 1977 *Emergency Salvage at the Ferguson Farm Site, Jackson County, North Carolina*. On file, Department of Sociology and Anthropology, Western Carolina University, Cullowhee, NC.
- DePratter, C., C. Hudson, and M. Smith  
 1985 Juan Pardo's Explorations in the Interior Southeast, 1566-1568. *The Florida Historical Quarterly* 62:125-158.
- Dickens, R.  
 1976 *Cherokee Prehistory: The Pisgah Phase in the Appalachian Summit Region*. University of Tennessee Press, Knoxville.
- Dorwin, J. T., R. N. Tiger III and E. M. Bistline  
 1975 *Upper Hiwassee River Survey*. Department of Anthropology, Western Carolina University.
- Dyson, D. M. and R. J. Snedeker  
 1991a Cultural Resources Survey for the Proposed Greens Creek/Barkers Creek Timber Sales, Compartments 7, 114, 115, and 117, Wayah Ranger District, Nantahala National Forest, Jackson and Swain Counties, North Carolina. On file, National Forests in North Carolina, Asheville.  
 1991b Cultural Resources Survey for the Proposed Bonas Defeat Timber Sale, Compartments 111, 112, Highlands Ranger District, Nantahala National Forest, Jackson County, North Carolina. On file, National Forests in North Carolina, Asheville.  
 1992 Cultural Resources Survey for the Proposed Sugar Creek Timber Sale, Compartments 92, 98, and 102, Highlands Ranger District, Nantahala National Forest, Jackson County, North Carolina. On file, National Forests in North Carolina, Asheville.  
 1993 Heritage Resources Survey for the Proposed Wayehutta ORV Trails, Compartments 87 and 89, Highlands Ranger District, Nantahala National Forest, Jackson County, North Carolina. On file, National Forests in North Carolina, Asheville.  
 1994 Heritage Resources Survey for the Proposed Fy 1993 Relocation of the Mountains to the Sea Trail, Compartment 94, Highlands Ranger District, Nantahala National Forest, Jackson County, North Carolina. On file, National Forests in North Carolina, Asheville.
- Glassow, M.  
 1977 Issues in Evaluating the Significance of Archaeological Resources. *American Antiquity* 42:413-420.
- Harmon, M. and R. J. Snedeker  
 1988 Cultural Resources Survey for the Proposed Sugar Creek Gap Road, Compartments 98, 99, and 102, Highlands Ranger District, Nantahala National Forest, Jackson County, North Carolina. On file, National Forests in North Carolina, Asheville.

- Hudson, C.  
 1986 Some Thoughts on the Early Social History of the Cherokees. In *The Conference on Cherokee Prehistory*, assembled by David Moore. Warren Wilson College, Swannanoa, NC.
- Hudson, C., M. Smith and C. DePratter  
 1984 The Hernando DeSoto Expedition: From Apalachee to Chiaha. *Southeastern Archaeology* 3:65-77.
- Jacobsen, M. B.  
 1992 Hugh Edmond Battle Family. In *Jackson County Heritage North Carolina Vol. I*. The Jackson County Genealogical Society, in cooperation with Walsworth Publishing Company, Marceline, MO.
- Keel, B. C.  
 1976 *Cherokee Archaeology: A Study of the Appalachian Summit*. University of Tennessee Press, Knoxville.
- Loucks, L. J.  
 1982 General Report on 1982 Excavations at the Ward Site (31Wt22). On file, Department of Anthropology, Appalachian State University, Boone, NC.
- McRae, B.  
 1992 Nantahala Power and Light Company History in Jackson County. In *Jackson County Heritage North Carolina Vol. 1 1992*. The Jackson County Genealogical Society in cooperation with Walsworth Publishing Company, Marceline, MO.
- Mooney, J.  
 1992 *James Mooney's History, Myths, and Sacred Formulas of the Cherokees*. Historical Images, Asheville, NC.
- Moore, D. G.  
 1986 The Conference on Cherokee Prehistory. Warren Wilson College, Swannanoa, NC.
- Page, S. L.  
 1973 Mining and Mineral Production in Jackson County, North Carolina. MA Thesis on file at Western Carolina University, Cullowhee, NC.
- Pratt, J. H. and H. M. Berry  
 1908 *The Mining Industry in North Carolina During 1908, 1909 and 1910*. Edwards and Broughton Printing Co., State Printers and Binders, Raleigh.
- Preston, J. P., M. S. Shumate and P. Evans-Shumate  
 2000 Archaeological Phase I Survey of the Proposed Moss Knob/Gage Gap-Gage Bald Sugar Creek Ridge Timber Sale Areas on the Nantahala National Forest, Jackson County, North Carolina. On file, National Forests in North Carolina, Asheville.

Purrington, B. L.

- 1981 Archaeological Investigations at the Slipoff Branch Site: A Morrow Mountain Culture Campsite in Swain County, North Carolina. *North Carolina Archaeological Council Publication 15*.
- 1982 Continuity and Change in Late Prehistoric Settlement Patterns in an Appalachian North Carolina Locality: Some Preliminary Interpretations. *Tennessee Anthropologist* 7:51-61.
- 1983 Ancient Mountaineers: An Overview of the Prehistoric Archaeology of North Carolina's Western Mountain Region. In *The Prehistory of North Carolina* edited by Mark A. Mathis and Jeffrey Crow. North Carolina Division of Archives and History, Raleigh.

Riggs, B. H.

- 1988 An Historical and Archaeological Reconnaissance of Citizen Cherokee Reservations in Macon, Swain, and Jackson Counties, North Carolina. Department of Anthropology, University of Tennessee, Knoxville. Prepared under a Survey and Planning Grant from the US Department of Interior and administered by the Office of State Archaeology, North Carolina State Historic Preservation Office.

Robertson, L. B. and B. P. Robertson

- 1978 The New River Survey: A Preliminary Report. *North Carolina Archaeological Council Publication 8*.

Senior, C. D.

- 1981 *A Preliminary Analysis of Pisgah Phase Ceramics from the Ward Site, Northwestern North Carolina*. Technical report submitted to the North Carolina Division of Archives and History, Raleigh.

Sherrill, M.L .

- 1996 *Soil Survey of Jackson County, North Carolina*. US Department of Agriculture, Natural Resources Conservation Service.

Shumate, M. S. and P. Evans-Shumate

- 1997 An Intensive Archaeological Survey of the Proposed Qualla Wastewater Line Corridor, Jackson County, North Carolina. Blue Ridge Cultural Resources, Boone, NC.

Shumate, M. S., P. Evans-Shumate, and L. R. Kimball

- 2000 Archaeological Data Recovery at 31SW265 on the Davis Cemetery Tract, Nantahala National Forest, Swain County, North Carolina, Management Summary. ASU Laboratories of Archaeological Science, Department of Anthropology, Appalachian State University, Boone, NC.

*The Sylva Herald*

- March 17, 1949.  
August 30, 1951.  
April 24, 1952.  
December 24, 1952.

Townsend, J., J. H. Sprinkle and J. Knoerl

1993 *Guidelines for Evaluation and Registering Historical Archaeological Sites and Districts*. National Register Bulletin 36. United States Department of the Interior, Washington, DC.

Williams, M. R. (ed.)

1987 *The History of Jackson County*. The Jackson County Historical Association, Sylva, NC.