A Report Prepared
for the
Environmental Planning Office
Tennessee Department of Transportation

Historical and Archaeological Documentation of the Wilson Mill Dam
on the Ocoee River near Benton, Polk County, Tennessee

Prepared by

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July 1983
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I wish to thank McKinley Hatcher and Kenneth Bates of Polk County for permission to access the Wilson Mill Dam through their properties adjoining the Ocoee River. G. W. Wilson, Registrar of Deeds at the Polk County Courthouse, provided courteous assistance to this researcher, as did the staff of the Tax Assessor's office. Mr. John Robertson provided copies of the 1880 Census of Manufactures, on microfilm at the Tennessee State Library and Archives; his assistance is gratefully acknowledged. My special thanks go to Roy Lillard of Cleveland, Tennessee, who provided useful background material on the mills of Polk County.

The Wilson Mill Dam field crew endured early mornings and cold river water in order to accomplish the fieldwork; my thanks to assistant archaeologist Sheron Yount and technicians Robert Lambdin and Lynda Lancaster.

While acknowledging the assistance of those noted above, any errors in fact or interpretation found within remain the sole responsibility of the author.

July 1983

R. Bruce Council
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Abstract

The Jeffrey L. Brown Institute of Archaeology, University of Tennessee at Chattanooga, conducted historical and archaeological documentation of the Wilson Mill Dam on the Ocoee River near Benton, Polk County, Tennessee, in July, 1983. Performed under a contract with the Tennessee Department of Transportation, the research involved 1) the development of a site-specific history of the mill and dam, based on primary and secondary documentation, 2) field documentation of the extant remains of the timber and stone crib-type dam and associated mill house remains, and 3) preparation of a synopsis of the development of milling in Polk County.

The mill seat was utilized from 1847 to c. 1940 for grist and flour milling, as well as lesser operations. The mill was powered by an undershot wheel, breast wheel and from the 1870s on, by turbine. Archaeological remains of the mill dam and associated features were photographed, mapped and described in field notes; no significant excavations were undertaken and no artifacts were collected. The principal remains documented were 1) an early debris-type dam, 2) a stone-filled timber crib dam, 3) penstock (turbine housing) remains, 4) mill house piers, and 5) possible early waterwheel underpinnings.
Introduction

The Wilson Mill Dam is situated on the Ocoee River about 2.6 miles upstream from its confluence with the Hiwassee River, and 1 1/2 miles northeast of Benton, the seat of Polk County, Tennessee. The remains of the mill dam run east-west diagonally across the course of the river which, at that point, flows northeast. Thus water ponded by this dam was forced to pass by the east bank of the river where the associated mill was situated.

Apart from the remains of the mill dam, the most prominent feature at the site is a steel truss highway bridge erected c. 1909. The bridge is at Log Mile 2.67 on the route of highway S-1154 connecting Benton with Benton Station, the latter being situated one-half mile due west from the mill dam.

The Tennessee Department of Transportation, as part of planning activities associated with the proposed construction of a replacement bridge for the aged steel truss bridge, conducted a preliminary archaeological reconnaissance of the area and noted the presence of the feature identified as the Wilson Mill Dam (Ward 1982). In compliance with federal and state cultural resource protection laws, further archaeological and historical investigations on the mill dam were required to assess the eligibility of the structure for inclusion on the National Register of Historic Places.

Through the University of Tennessee's Transportation Research Center in Knoxville, the Department of Transportation solicited competitive bids for the additional investigations. The Jeffrey L. Brown Institute of Archaeology, University of Tennessee at Chattanooga, was awarded the contract for the research.

The scope-of-work for the investigations involved three areas of research. First, the dam and related structures were to be archaeologically examined and documented, with heavy reliance on photography for recording details of dam construction. Second, a site-specific documentary history of the dam and associated mill was to be prepared using primary and secondary historical resources. Third, the scope-of-work called for a synopsis of grist and flour milling in Polk County in order to provide a historical perspective for the assessment of the significance of the Wilson Dam and Mill.

Documentary History of the Wilson Mill and Dam

This site-specific reconstruction of the Wilson mill complex through time is based largely on secondary accounts appearing in period newspaper articles and on the official records of Polk County. Of the latter data source we note the following limitation: the Polk County Courthouse has burned twice in the history of the county, the earlier fire of 1894 having destroyed most county records including deed records. Thus deed transactions prior to 1894 have been reconstructed (in part) by later references in other deeds.

In the documentary research on Wilson's mill dam one of the most productive information sources was the scrapbooks of J. D. Clemmer, a Polk County resident and historian/commentator. His scrapbooks, available on microfilm, consisted for the most part of newspaper clippings principally from Benton, Cleveland, Knoxville and Chattanooga newspapers. Unfortunately, it is often difficult or impossible to attribute a clipping to a specific newspaper issue. Nonetheless, Clemmer's scrapbooks were gleaned for pertinent material and were found to be extremely valuable.

One such Clemmer clipping, appearing in 1915 in Cleveland, Copperhill and Benton newspapers (and which may have been written by Clemmer himself)
summarized in detail the evolution of the mill from its beginnings in the
1840s to the second decade of this century. It is transcribed below in its
entirety.

ROLLER MILLS SOLD

WELL KNOWN ROSE-BOYD-BENTON
ROLLER MILL CHANGES HANDS.

Benton, March 10.--Late Saturday afternoon the historic
Rose-Boyd-Benton roller mills situated on the Ocoee river 1 1/2
miles northwest of Benton changed hands. The selling price was
$5,000 and the deed vests title in W. O. Taylor of Cleveland.
The 30 day option given by the owners, R. A. Harrison, Albert
Crumley and J. D. Nuchols, would have expired a day later. S. M.
Paul, real estate dealer of Benton, made the trade. The name
will be changed from the former title to the Benton Milling &
Development Co. The three story building on the east bank of the
river with comparatively new Nordyke & Marmion Co. roller
process machinery of large flour producing capacity, and also
burr outfit for making water ground meal, with warehouse and off-
fice buildings nearby with a new five foot dam 240 feet long and
two acres of ground adjoining the mill compose the main improved
property, but the deeds include over an acre partly above high
water on the west bank a quarter (mile) from Benton depot on the
L. & N. Ry. This ideal manufacturing site in easy reach of side
track extension, with enormous power going to waste over the
mill dam, is likely to be utilized in the near future.

In 1847, Zachariah Rose, a noted pioneer preacher, teacher and
millwright, built the first mill on this site. It was called a
"Tub Mill," was propelled by a large undershot wheel, and ground
corn only. The larger timbers were hewn on the sides of
Sugarloaf mountain and rafted down the Ocoee river. A two foot
square poplar taken from the forbay foundation three years ago
when the new style powerful turbine wheel was installed, is
lying nearby as sound as a dollar, merely discolored an inch or
so deep. The sawed timber was hauled from the foot of the
Chilhowie under Benton Springs.

The first dam was logs, brush and rocks, which at low water
allowed the river to flow through while people walked across the
river on top of the dam dryshod. Below the dam was the most
noted fishing place in lower East Tennessee, fish being caught
by the thousands every year; but since mining wash from the cop-
per mines began flowing into the river several years, fish will
not stay in the stream, only one having been seen in its waters
during the past several years.

About 1854 Jacob L. McClary bought the mill and the large 300
acre farm up the river on the east side, selling the mill to M.
V. Reid. The first wheat mill, millstone style, was put in
before the Civil war and a larger wheel of the breast wheel kind
was put in, and a turbine in the seventies. During the war Capt.
Harbison's men captured Newt Taylor, Sr., there with his team
and Union soldier escort. Soon after the close of the war Erby
Boyd bought the property and erected a wool carding machine and
building below the mill, which about 1881 was moved to the Paul cotton gin along with the building. About the time the carding machine building was erected a saw mill was built on the west bank and about a fourth of the dam turned down toward that bank, making a V shaped dam. The saw mill was owned by Erby Boyd and G. W. Paul but was almost washed away by the high waters in 1875. The Boyd mill ford, at first straight across the river, later moving down stream, has been abandoned since the building of the $20,000 steel bridge near the old canoe landing, later a ferry site. The fordway is still used in getting to the frequent baptizings, thousands having been baptized here during the past 70 years.

Accidents over the mill dam have been few, only one being remembered as fatal, that of Isaac Fields, whose bateau and lantern went over with him.

Erby Boyd owned the mill for 20 years, part of the time half interest being owned by J. L. McClary, later by Spencer Boyd. Joe G. Cate bought it in 1886, N. B. Dunn in 1897, S. H. Wilson in 1899, and in 1913 Messrs. Harrison, Crumley and Nuchols bid it in at the Wilson heirs' sale.

The following material expands the narrative quoted above, and details the site-specific history of the Wilson Mill as developed from an examination of primary and secondary documentation.

Polk County was created out of former Cherokee lands ceded to the United States under terms of the Treaty of New Echota in 1835. The Ocoee District was organized in October 1836 and surveyed during 1837. By an act of the General Assembly of Tennessee on November 28, 1839, Polk County was formed from the eastern portion of Bradley County and a small portion of McMinn County (Barclay 1946:21). The county was named in honor of James K. Polk, then governor of Tennessee, and Senator Thomas Hart Benton of Missouri was the namesake of the county seat. The temporary county seat of Columbus on the Hiwassee was abandoned in favor of the new town of Benton on Fourmile Branch in 1840.

Because of the absence of the original deeds of Polk County, it is not known when or from whom Zachariah Rose acquired the mill seat northwest of Benton. Rose, who is acknowledged to have built over a dozen mills in the area, evidently constructed the mill in question in 1847. It was probably during Rose's tenure at the mill seat that the place acquired the tradition of baptizing; Rose was a Baptist preacher in addition to his trade of millwright.

As noted in the newspaper article initiating this section, the mill was first powered by an undershot wheel, and the dam was a rude affair composed of debris. It was perhaps after J. L. McClary sold the mill to Martin V. Reid that the breast wheel was installed at the mill. What is presumably a burrstone milling apparatus was also added at about this time; the reference to the "Tub Mill" in the article above is easily confused with "tub wheel," a type of horizontal water wheel. "Tub mill" appears to refer to the corn-grinding apparatus powered by an undershot wheel.

As later deeds would recount, Erby Boyd purchased the mill from Martin V. Reid in January, 1862. Williams, in his Confederate History of Polk County, Tennessee: 1860-1866 (1923), reported that "In the winter of 1863-64 Captain Harbison attacked and captured a squad of Yankees at Boyd's Mill. There were six or seven of them. They had gone to mill with a wagon load of wheat" (Williams 1923:28). As the initiating article of this section noted, a local
civilian, Newt Taylor, Sr., was accompanying the Union soldiers. Although volleys were exchanged, there were apparently no serious injuries.

It was in February, 1878, that Samuel H. Wilson, apparently an adjacent land owner, traded some property to Erby Boyd for slightly over an acre of land near the mill. The transaction included this description of the tract conveyed:

...about one acre and a quarter off the Boyd Mill yard, commencing at the North Eastern corner of the Boyd Mill property on the east side of Ocoee River as described in the deeds to said property heretofore—thence South 20 degrees West 16 poles to a rock corner, thence North 70 degrees West 19 poles and 3 links to a stake, thence East about 27 degrees North to the section line, thence East along the section line 4 rods and 23 1/2 links to the beginning corner. (PCDB 1:400)

The purpose of the transaction, actually a land trade, is not clear; the three acres conveyed by Wilson to Boyd bordered the road to the mill.

Special Schedule No. 7 of the 1880 U. S. Census was aimed at collecting detailed information on flour and grist mills which produced over $500 in products yearly. In Polk County apparently only two such mills were enumerated: William Scarbrough's Chestuee Mills on Chestuee Creek and Erby Boyd's mill on the Ocoee. Table 1 summarizes the data on the Schedule 7 sheets. Boyd's mill was described as utilizing a fall of five feet, and the two runs of millstones were powered by a single turbine five feet in diameter and producing 20 horsepower.

Erby and Harriet E. Boyd sold the mill and mill tracts to Joseph G. Cate for $2400 on January 7, 1886. The legal description, in addition to providing the earliest complete statement of metes and bounds, mentions other details of interest. The transaction included:

...three several small tracts or lots of land situated in the second civil district of Polk County, Tennessee, altogether known as the Erby Boyd Mill property and severally described as follows—One tract conveyed to me, Erby Boyd, by Martin V. Reid on the 4th day of January, 1862, situated in the Ocoee District range 2nd east, fractional township 2nd north, section 30, beginning at a stake in the center of the Ocoee River on the quarter section line between the Southeast and the Northeast quarter of said section; thence south 70 degrees east 27 1/2 poles to a stake, thence south 20 degrees west 16 poles to a stake, thence north 70 degrees west 20 poles to a stake on the bank of the said river; thence southward up the bank of said river 151 poles to a stake on the line of J. C. Hood and J. N. Reed, as heretofore existing; thence north 70 degrees west about 7 1/2 poles to the center of said river, thence north with the meanderings of the center of said river to the beginning, out of which said boundary has been sold a lot of one acre more or less to S. H. Wilson, which said lot, sold to said Wilson, is not hereby conveyed. A second lot or tract of land hereby conveyed is a tract or lot conveyed to me, Erby Boyd, containing three acres more or less, lying on the road from the Boyd Mill to Benton, bounded on the north by said road, on the east, south and west by the lands of said Wilson, said lot being
<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>(1ST CIVIL DISTRICT)</th>
<th>(2ND CIVIL DISTRICT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Name of Corporation, Company or Individual Producing to the Value of $500 annually.</td>
<td>William Scarbrough</td>
<td>Erby Boyd</td>
</tr>
<tr>
<td>2. Capital, (Real and Personal), Invested in the business.</td>
<td>$8,000</td>
<td>$5,000</td>
</tr>
<tr>
<td>3. Greatest Number of Hands employed at any one time during the year</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Average number of hands employed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Males above 16 years</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5. Females above 15 years</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>6. Children and youth</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Wages and hours of labor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of hours in the ordinary day of labor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. May to November</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>8. November to May</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>9. Average day's wages for a skilled mechanic</td>
<td>$1.00</td>
<td>$1.00</td>
</tr>
<tr>
<td>10. Average day's wages for an ordinary laborer</td>
<td>$.50</td>
<td>$.50</td>
</tr>
<tr>
<td>11. Total amount paid in wages during the year</td>
<td>$800</td>
<td>$500</td>
</tr>
<tr>
<td>Months in Operation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. On full time</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>13. On three-quarters time only</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>14. On half-time only</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>15. Idle</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>16. Number of runs of stones</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>17. Estimated maximum capacity per day in bushels</td>
<td>200</td>
<td>150</td>
</tr>
</tbody>
</table>
Table 1 (continued)

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>(1ST CIVIL DISTRICT)</th>
<th>(2ND CIVIL DISTRICT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>18.</td>
<td>Do you do custom work or make only for a market?</td>
<td>custom 3/4</td>
</tr>
<tr>
<td></td>
<td>If the former, what proportion of your product is custom grinding?</td>
<td></td>
</tr>
<tr>
<td>19.</td>
<td>Is there an elevator connected with your establishment?</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>If so, state capacity in bushels.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Power used in manufacture</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>If water power is used</td>
<td></td>
</tr>
<tr>
<td>20.</td>
<td>In what river or stream?</td>
<td>Chestuee Creek</td>
</tr>
<tr>
<td>21.</td>
<td>Height of fall, in feet</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td><strong>Wheels</strong></td>
<td></td>
</tr>
<tr>
<td>22.</td>
<td>Number</td>
<td>2</td>
</tr>
<tr>
<td>23.</td>
<td>Kind</td>
<td>36 inch</td>
</tr>
<tr>
<td>24.</td>
<td>Breadth, in feet</td>
<td>3</td>
</tr>
<tr>
<td>25.</td>
<td>Revolutions per minute</td>
<td>94</td>
</tr>
<tr>
<td>26.</td>
<td>Horsepower</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td><strong>Materials</strong></td>
<td></td>
</tr>
<tr>
<td>30.</td>
<td>Number of bushels of wheat</td>
<td>3,000</td>
</tr>
<tr>
<td>31.</td>
<td>Value</td>
<td>$3,000</td>
</tr>
<tr>
<td>32.</td>
<td>Number of bushels of other grains</td>
<td>1,500</td>
</tr>
<tr>
<td>33.</td>
<td>Value</td>
<td>$750</td>
</tr>
<tr>
<td>34.</td>
<td>Value of mill supplies</td>
<td>0</td>
</tr>
<tr>
<td>35.</td>
<td>Total value of all materials</td>
<td>$3,750</td>
</tr>
<tr>
<td></td>
<td><strong>Products</strong></td>
<td></td>
</tr>
<tr>
<td>36.</td>
<td>Number of barrels of wheat flour</td>
<td>200</td>
</tr>
<tr>
<td>37.</td>
<td>Number of barrels of rye flour</td>
<td>0</td>
</tr>
<tr>
<td>38.</td>
<td>Number of pounds of buck-wheat flour</td>
<td>0</td>
</tr>
<tr>
<td>39.</td>
<td>Number of pounds of barley meal</td>
<td>0</td>
</tr>
<tr>
<td>40.</td>
<td>Number of pounds of corn meal</td>
<td>81,000</td>
</tr>
<tr>
<td>41.</td>
<td>Number of pounds of feed</td>
<td>17,000</td>
</tr>
<tr>
<td>42.</td>
<td>Number of pounds of hominy</td>
<td>0</td>
</tr>
<tr>
<td>43.</td>
<td>Value of all other products</td>
<td>$200</td>
</tr>
<tr>
<td>44.</td>
<td>Total value of all products</td>
<td>$4418</td>
</tr>
</tbody>
</table>
all enclosed, and is the lot of land now occupied by Dow Dickerson, the miller who attends said mill, said mill being located on the lot first herein described. The third lot of land hereby conveyed is described as follows; Beginning at the old ford of Ocoee River at G. W. Paul's line thence west with said line eight rods to a rock corner, thence up the river 30 poles to a rock corner, thence southeast eight rods to the river, including the bed of the river around to the beginning in the same section with lot no. one heretofore described and in the southeast quarter of said section. (PCDB(RR) 1:189-190)

The deed demonstrates that the mill, while owned by Boyd, was being operated by a hired miller. It also gives the date of the transfer of the mill from Reid to Boyd as 1862, and not after the Civil War as the newspaper article quoted above suggests.

The mill and mill tracts conveyed above to Cate were sold at public auction in September, 1897 to N. B. Dunn (PCDB 3:250-252). Two years later, on April 26, 1899, N. B. Dunn and his wife Alice sold the mill and mill tracts to Samuel H. Wilson, who already owned adjacent property. A June, 1899 newspaper clipping (Clemmer's Scrapbook 1:82) commented that Smith and Dunn had sold the mill: no record of a Smith owning the mill, or an interest in the same, was found. The article also noted that "this mill, known as the Boyd mill, was not long since rebuilt and improved roller process put in." The selling price was $3000 (PCDB 3:253).

It was during 1899 that Wilson took legal action against some Chattanooga loggers whose timber rafts had floated against the mill dam and damaged the structure. A newspaper article of September 15, 1900 (from Clemmer's Scrapbook No. 2, page 94) describes the action:

The time of the Chancery Court, Chancellor McConnel presiding, was mostly taken up by the lawsuit of Wilson vs. Dunlap and Blair. Wilson owns a mill, roller process and mill dam across the Ocoee river. Dunlap and Blair are Chattanooga loggers operating on Ocoee river, and their properties and interests clash—saw logs against the mill dam and the logging profits against the milling profits. The main question involved is the navigability of Ocoee river.

Wilson had sued Dunlap in July, 1899, and received $75 in damages. Dunlap and Blair appealed to the Circuit Court and lost. Finally, the Supreme Court of Tennessee heard the appeal of R. P. Dunlap and F. W. Blair in October 1901 and declined to reverse the lower court's decision. Wilson was granted a permanent injunction against Dunlap and Blair (and other loggers) to prevent them from passing rafts over his dam without first giving bond. The Ocoee River was declared not navigable.

The floating of timber down river was usually reserved until periods of high water, when the timber rafts could clear obstructions in the channel. It is not known if the Boyd-Wilson dam had a sluiceway or water ramp in its length to permit boats or log rafts to pass the dam. From Clemmer's scrapbook comes this contemporary description of some logging activity, c. 1901:

R. P. Dunlap has several thousand logs in Ocoee river, most of them near Parksville. He has a splash dam on Bakers Creek south of Parksville, for floating out timber, and a log boom at the
standing rock in Ocoee below the Wilson Mill and about a mile above the mouth of Ocoee. (Clemmer's Scrapbook 2:118)

The log boom, to capture timber before it entered the Hiwassee River, may have changed hands by February, 1903, as this newspaper clipping excerpt suggests.

Early Wednesday morning two rafts of telephone poles which had been for some time past tied up near Barne's Ferry, on Ocoee river, broke loose on account of the sudden rise in the water from the previous night. The rafts hung up on the Wilson mill dam for a while, then floated against the "Standing Rock" log boom of Harbison and Hilderbrand's. (Clemmer's Scrapbook 3:23)

Since 1900 there had been discussion in county government of the erection of steel highway bridges over the Hiwassee, Ocoee and Conasauga Rivers. A proposed crossing over the Ocoee was near Wilson's farm. On July 20, 1908, Samuel H. Wilson and his wife Nannie J. Wilson deeded a strip of land 30 feet wide for the bridge right-of-way to Polk County (PCDB 9:557-559). A plat accompanying the deed appears in Figure 1. The deed mentioned that the bridge and accompanying road were to be completed by January 1910, and that R. B. Wilson had a half-interest in the mill. The bridge also created a new route between Benton and Benton Station. The ford below the mill dam was abandoned, and after crossing west over the Ocoee, the new road curved north to connect with the old Benton Station road.

Samuel H. Wilson made a will on May 18, 1906, and bequeathed the mill to his wife, Nannie (or Nancy) J. Wilson, and his son, R. B. Wilson (Polk County Will Book F, pages 156-159). The following year he deeded the mill and mill tracts to Nannie and R. B. Wilson; the April 30, 1907 deed recounted details of the suits brought against Joseph G. Cate and their settlement in September, 1897 (PCDB 8:387-8).

Following Wilson's death, there was some legal maneuvering to settle debts among the heirs. R. B. Wilson and his wife, Lucinda, conveyed to W. F. Russel, in trust, an undivided half interest in the mill property for purposes of its sale (PCTDB 5:425-428). This, done in October, 1911, was followed by a suit by B. B. C. Witt and J. D. Nuchols to secure payment of a note made by Wilson and Runions. The trustee, W. F. Russel, declined to make the sale of the mill property and B. F. McClary was appointed the new trustee of the Wilson Mill property. McClary made deed to J. D. Nuchols, R. A. Harrison and Albert Crumley for a purchase price of $2000 in February 1913 (PCDB 13:115-117). A later decree confirming the sale was made on October 28, 1913 (PCDB 13:26-27).

W. O. Taylor bought a 30-day option on the purchase of the mill and mill tracts on February 6, 1915 (PCDB 15:4-6). Nuchols, Harrison and Crumley sold the mill and mill tracts to W. O. Taylor, Trustee for the Benton Milling and Development Company on March 1, 1915 (PCDB 15:28-30). The purchase price was $4800 and included mill machinery and water rights. Earlier in the year, on January 19, 1915, Nannie Wilson and her son, R. B. Wilson, sold the 320 acre Wilson "home farm" to C. W. Gamble and W. M. Moore for $11000 (PCDB 14:541-542). On the same day, Nannie Wilson sold to Gamble and Moore a small tract of land on which stood the miller's house (PCDB 14:543-544).

In June, 1920, W. O. Taylor disposed of the Wilson Mill property. On June 24, 1920, Taylor sold the water rights of the mill to the Tennessee Power Company for one dollar "and other valuable considerations" (PCDB 18:570-571). The transaction included
the banks and bed of the Ocoee River and water rights and privileges thereto belonging and used in connection with the operation of what is known as the Boyd or Wilson mill. Also including the right to keep and maintain or remove the mill dam in the Ocoee River, at or near the mill building.

The accompanying plat (Figure 2) shows the basic arrangement of dam and mill structures, the later including the mill and an addition, and the nearby miller's house. What is apparently a turbine penstock is shown at the front of the dam, and adjacent to the mill.

Taylor sold, on June 25, 1920 (the day after selling the water rights), the two mill tracts, mill house and machinery, to W. S. Vineyard for $1300 (PCDB 19:12-13). Evidently the mill could use the water power at the sufferance of the Tennessee Power Company, which had purchased the water rights for purposes unknown. W. S. Vineyard and wife Betty sold the mill and mill tracts for $2000 to A. T. Humphreys on January 31, 1921 (PCDB 19:330-332).

Following Vineyard's sale of the mill to Humphreys there was some controversy surrounding the water power rights associated with the mill. W. O. Taylor was evidently a member of the Tennessee Power Company, and had sold the water rights to them for one dollar and other considerations (see above). On July 29, 1926, the company quit claimed the water rights to Humphreys, with a vague reservation:

...The said Tennessee Electric Power Company, a corporation, and successors in title to the said Tennessee Power Company, quit claims and conveys to the said Alfred Humphreys, his heirs and assigns, the right to use and maintain the dam known as the Wilson mill dam and the waters of the Ocoee River, in so far as the same does not conflict with their rights. (PCDB 23:504-505)

B. F. Manning, secretary-treasurer of the company, signed the quitclaim. W. S. Vineyard also quitclaimed the title to the mill and mill tracts to Humphreys on July 31, 1926 (PCDB 23:506-508).

At this time A. T. Humphreys was leasing the mill to Newton Stephenson. The lease agreement, made January 26, 1926, was to run for three years; the rent was $16.75 a month. Among the properties being leased were the following; one six-room house and outbuildings on the west bank; on the east bank one mill house, one mill dam, one water wheel, one corn crusher, one corn cleaner, one corn mill, one emery stand, two line shafting, five pulleys, four belts and all mill lands. The lease also permitted "...power to manufacture lumber, baskets and woodenware." The lease included many clauses concerning fire insurance provisions, addition of equipment, etc. (PCTDB 14:223-226).

After Humphreys' death there was civil suit action among his heirs. On February 16, 1934, A. R. Arp, Clerk of the Polk County Court, deeded the Erby Boyd Mill property to Mark Lawson. The sale, which followed settlement of a suit between J. W. Humphreys (Administrator) and Newt Humphreys, included the east bank tract of the mill property, with the mill house and water rights (PCDB 31:14-15). Shortly thereafter, on May 7, 1934, Mark Lawson and his wife, Liola, sold the mill house, water rights and mill tract to Jim Lawson for a token one dollar (PCDB 30:516-517). The Wilson (Erby Boyd) mill property, with mill house and water rights, was sold by Jim Lawson and his wife, Lou, to Kenneth Lawson for $200 on October 19, 1935 (PCDB 30:518-519).

Kenneth Lawson and wife Margie used the mill property to secure a debt. A trust deed titled the property to Charles Williams, Trustee for the Benton
Banking Company on February 26, 1936 (PCTDB 21:361-363). The debt was satisfied, and on October 12, 1937, Kenneth and Margie Lawson sold the four-acre Wilson Mill property to Jim Lawson, a widower, for a token one dollar, with the provision that should he die or remarry, the property would be conveyed to Chester Lawson, J. B. Lawson, Kenneth Lawson, Clarence Lawson, Mrs. Lillian Ball, Mrs. Sarah Collie, Louis Lawson, and Mrs. Ressie May Griffiths (PDB 32:403).

Figure 3 depicts the vicinity around the Wilson Mill as represented on the 1935 edition of the United States Geological Service (USGS) 7.5 minute Benton quadrangle map. In addition to the dam and mill house, several structures and an unimproved road are depicted in the area. The house shown on the west bank and the house on the east bank near the junction of the Benton highway and the mill road are evidently still standing today.

A direct conveyance forward by Jim Lawson was not located in the Polk County deed books. Reconstruction of the chain of title from Lawson forward to the present owner, McKinley Hatcher, was not completed. However, the 1940 edition of the USGS-TVA Benton 7.5 minute quadrangle map depicts the mill dam but not the mill house proper, suggesting that by that year the structure was demolished or destroyed; notes on the quad map indicate that the data were field checked by a TVA crew in 1940.

The evidence suggests that by 1940 the mill structure depicted on several plats presented above (Figures 1, 2, and 3) was no longer standing. Subsequent editions of the USGS quad maps do not depict any reconstructions of the mill house, and by 1963 the unimproved road leading to the mill (and the house at the end of the road), seen in Figure 3, were absent. The mill seat, occupied for nearly a century, had apparently been abandoned in the late 1930s.

Archaeological Documentation of the Mill Dam

The archaeological fieldwork at the mill dam consisted primarily of documentation in the form of transit survey, measured drawings and photography of the extant remains. Only one small excavation, on the west dam remnant was made to reveal a structural detail. Consequently, the fieldwork is described as archaeological documentation and not subsurface testing. No artifacts were collected during the fieldwork. All notes, photographs and maps are permanently curated at the Institute of Archaeology.

The proposed three-day fieldwork program had to be spread out over four days; one full day and three mornings were spent at the site. This shift in schedule was necessitated by the water levels in the Ocoee River. The water level in the river is controlled by the Ocoee No. 1 Power Station upstream at Parksville, operated by the Tennessee Valley Authority. Ocoee No. 1 is a peak generating unit, and the reservoir is tapped daily to drive the plant's turbines. The released waters typically reach the Wilson Dam area between 11:00 AM and 12:00 noon daily, raising water levels nearly three feet and inundating the hydraulic (wet) areas of the dam. As a result, work in the hydraulic areas was restricted to the period from 7:00 to 11:00 AM.

The first day at the site was spent clearing vegetation and debris which had accumulated on the remnants of the dam. This work enhanced photographic recording as well as observation and inspection of the dam construction. As the water level rose at midday, the crew resituated on the east bank of the river and cleared brush around the limestone mill house foundations. Additionally, a temporary transit station was set up and elevations on the
Mill foundations were tied into a DOT temporary bench mark located on a pine tree; the bench mark permitted vertical control on the dam remains. On the three remaining mornings the survey, mapping and photography of the mill dam remains progressed. The dam consisted of a log crib filled with large, usually angular rock. The dam stretched diagonally across the Ocoee River in a nearly east-west line, the river at that point running northeast. Thus the dam had served to funnel water past the mill on the east bank. As the dam approached the east bank, the heavy log and stone crib terminated and the smaller crib remains angled to the south to strike the east bank perpendicularly. In the near vertical walls of the east bank were the remains of two stone piers which has served as the northwest and southwest foundations of the mill house; while the majority of the mill structure appears to have been resting on the upper bank, at least the west side of the mill was suspended over the river's edge.

This, in simple form, was the basic configuration of the mill dam remains. At low water, and when the water was unmuddied, substantial remains of timberwork were visible in the bed of the river adjacent to and north of the mill foundation area. Further, the apparent remains of an earlier dam were noted above the crib dam. Figure 5 is a planview of the site.

The Dams

The remains of two dams were present in the river bed. The more fragmentary, and presumably the earlier of the dams consisted of two short lengths of broken stone ballast that stand out during low water; there are associated logs set perpendicular to the line of the dam. Figure 4 is a view from the present highway bridge and depicts the dam remains on the eastern side of the river. Although somewhat obscured by debris, the early dam remnants are apparent, upstream of the later massive crib dam.

The early dam was set at a more acute angle than the later crib dam downstream; the early dam angles across the Ocoee River on an approximate bearing of 76 degrees east of north. If the line of the dam is carried straight into the east river bank, it would land downstream from the visible mill foundations. Timbers in association with this dam are primarily logs 3 to 3.5 m (10 to 12 feet) in length, laid across the width of the dam (3.5 to 3.6 m) among the ballast stones. The logs are not sawn or otherwise modified to create mortise and tenon joints, and in all seem insubstantial and apparently not part of an integrated structural framework as evidenced by the crib dam downstream.

It is probable that the fragmentary upstream dam represents the first mill dam at the site, described in the documentary section as a debris-type dam. Figure 6 is an example of this general type of dam, composed of brush, logs and stone, taken from Leffel's The Construction of Mill Dams (1881). This type of dam was relatively inexpensive and was used for very low heads (fall).

The more substantial dam at the site, and the object of most of our attention, is described as a rock-filled, timber crib dam. The structure consists of an interlocked log crib (or box) which served as the structural framework for ballast stone. The finished surface of the dam was probably revetted with planks. Figure 7 is a representation of this general type of dam, taken from Leffel's The Construction of Mill Dams (1881). The cross-sectional shape of the dam is that of a wedge, with the trailing edge of the dam (also known as the air face) being higher than the leading edge.

Like the early dam, the crib dam angles across the river bed, but on a bearing roughly 97 degrees east of north. The east end of the dam, adjacent
the mill, turns to the south roughly 20 degrees as it approaches the east bank; this configuration corresponds to the 1920 plat representation of the mill dam (Figure 2, above).

The crib dam terminates roughly 21.6 m (71 feet) from the mill foundations, at the angle; from this point eastward to the bank and mill foundations a less substantial abutment was evidently employed. The extant log crib dam is c. 82 m (270 feet) in overall length. The dam has been breached at its middle, dividing the dam into east and west remnants. The west remnant is c. 18.7 m (61 feet) long, and the east, c. 31.4 m (103 feet). The simple width of the cribbing is c. 5.0 m (16.5 feet), measured from the centerline of the leading edge timbers of the dam to the centerline of the trailing edge. Timber size and the presence of additional structural elements increase the width to nearly 6 m (c. 20 feet).

Of the two surviving lengths of the crib dam, the eastern is perhaps the best preserved and stands higher than the western remnant. While the western remnant is largely buried in a silt bank, it reveals several key construction features not seen elsewhere.

Except for the uppermost timbers in the dam and the leading edge stringer, the crib is composed of logs (round in section) interlocked with steel drift pins. The logs are generally fitted by shallow notching, in the manner of a log cabin type of construction. In our terminology, long logs running the length of the dam are called stringers, and logs running across the width of the dam are cross-pieces.

On the west dam remnant, on the trailing edge side of the dam, there are visible three tiers of stringer logs and four tiers of cross-pieces (see Figure 8). Along the leading edge there is evidently only one stringer timber line. Stringer timbers along the trailing edge of the west dam remnant were joined by lap notches 50 to 60 cm (1.6 to 2.0 feet) in length. The lower tiers of cross-pieces intersected the stringers at intervals ranging from c. 1.3 to 1.6 m (c. 4 to 5 feet), with most intervals falling around 1.4 m (4.5 feet). The uppermost tier of cross-pieces sat atop the highest surviving stringer at intervals from .50 to 1.3 m, with most in the narrow range from .90 to 1.0 m (or roughly 3 feet).

The log crib served as a containment structure for heavy broken stone ballast, which anchored the dam to the river bed. Typically, such dams had a planked face to seal the dam and prevent water from cutting through the structure. On the west dam remnant there was evidence of this type of planking. The upper surfaces of the highest surviving cross-pieces had been hewn flat to seat planks 3.3 cm (.11 feet) thick and of widths ranging up to 24.3 cm (.80 feet). A small trench was excavated through the silt covering the leading edge of the dam to expose a section of this planking, laid longitudinally on the dam face (see Figure 9). The revetting was fastened to the underlying cross-pieces with large wire nails.

Along the leading edge of the west dam remnant were the remains of sheet pilings. These abutting planks were vertically driven into the river bed and nailed flush against the face of the leading edge stringer. This sheet piling was intended to prevent undercutting of the leading edge of the dam (see Figure 10).

No evidence of a splash apron was noted on either remnant of the dam. Splash aprons were timber (or stone) surfaces at the base of the trailing edge of a dam, and were intended to prevent undercutting and erosion of the river bottom caused by water spilling over the crest of the dam. An example of a splash apron can be seen in Figure 7. There were evidently no piles or vertically-driven posts used to anchor the dam to the river bed, although they simply may not have been visible.
The east dam remnant revealed few additional structural details, but was less obscured than the west dam remnant. There was notable variation in the stringer/cross-piece tier arrangement, occasioned by the use of much larger logs in a few places (see Figure 11). The crib dam is best described as strictly a custom-built dam, with much variation in timber size, spacing and general arrangement. Ultimately, it was the height of the dam crest (along the top trailing edge of the dam) that was of paramount importance.

The final slope of the extant face of the dam was on the order of 8 to 9 degrees, although additional timberwork may not have been represented archaeologically. The sheet piling along the leading edge of the east dam remnant had been washed away, clearly revealing the single stringer line; no underlying cross-pieces were noted to articulate with this stringer. At the extreme east end of the dam, erosion exposed some of the internal timbers of the dam, including a box-type crib construction and an intermediate stringer running down the centerline of the dam. It was apparently the box-crib line, comprising the north or trailing half of the dam, that had been set into the river bed. As the crib was carried above low water, stringer timbers were added to the trailing edge and cross-pieces were pinned to the leading edge stringer. The dam face angle was formed by placing additional stringer courses along the trailing edge and nailing cross-pieces to the same leading edge timber. This splayed cross-piece pattern is visible in Figure 12.

The Penstock Area

Between the easternmost point on the east dam remnant and the mill house foundations in the river bank are the remains of the turbine penstock (or housing), associated abutments and other related features. It was this portion of the dam that angled to the south to strike the mill foundations at right angles. The timber crib dam apparently terminated at the angle, and a slightly narrower rock-filled log crib was employed between that point and the turbine penstock. Only one 5 m section of the rock-filled log crib survives; its width was 3 m or 10 feet. Between the crib and the crib-dam only a few sawn timbers set into the stream bed survive; this area may have housed a sluiceway or spillway through the dam.

East of the small crib was the turbine penstock. Both the small crib and penstock rested on a system of sawn timbers forming a low trestle. Mortise slots are present in most of these beams, and four square upright posts define the west edge of the trestle area; the small crib was set within the limits of the trestle and its uprights (see Figures 13 and 14). A small area of the thick plank floor of the penstock was exposed, revealing one-quarter of the circular water egress aperture in the penstock floor. The floor of the penstock (a water containment box in which sat the turbine) was at an elevation of c. 213.76 m or 701.35 feet AMSL.

The stone-filled log crib was used to anchor the penstock underpinnings to the river bed. This crib was surrounded by a wooden-frame shell rising from the underpinnings by means of posts mortised into the joists. This shell was quite possibly plank revetted, sealing the crib. The circular aperture in the penstock floor was intended to provide an egress for waste-water from the turbine. It is likely that the bearings of the turbine were set into or attached on one of the heavy sawn, joists underlying the penstock floor.
The Mill House Foundations

The remains of two massive limestone piers are present in the east river bank, forming the west wall line of the mill house and measuring 9.8 m or 32 feet, outside measure. The higher of the two piers terminates at an elevation of 216.40 m or 710.01 feet AMSL; this is roughly the ground level of the local flood terrace.

The footings were apparently not continuous along the west wall line of the mill, although the lower courses of the northwest pier stretch several meters toward the adjacent pier. The southwest mill pier displays the stub of an iron reinforcing or anchoring bolt in its surface. The south wall line of the mill corresponds to the distance of 233 feet shown on the 1908 land plat (shown in Figure 1). The higher of the two piers is in an unstable configuration (see Figure 15).

Additional mill house foundation piers east of the river bank were undoubtedly present, but no in situ stones remain. Numerous limestone blocks are on the river bank and adjacent the mill area, but have been displaced by cultivation activities. When standing, the west side of the mill house would have been suspended over the edge of the river bank. Gears and line shafting would have transmitted the power from the turbine to the mill machinery.

Miscellaneous Features

Downstream from the stone mill house foundations, partially buried in a talus from the adjacent river bank, and underwater, are the remains of what may be an earlier mill or mill wheel foundation. Several wooden beams with tenon-joint ends project from the bank, but two complete bays are present, formed by joined, sawn beams. These timbers may represent the underpinnings of the early vertical wheels used at this mill site: the undershot and breast wheels. Both types of wheels require lined races or flumes above and (to a certain extent) below the wheel. The timbers, resting under two feet of water and largely buried by silt, were given only cursory inspection. One sawn, upright timber was noted in the talus of the bank, in line with the middle timber of the completed bays. These timber frameworks may have served as the underpinnings of the raceway and wheel mounts.

To the west of these timbers is a rock spoil bank which incorporates several long logs. There is no evidence that the timbers or rock debris were part of a highly organized structure, but they may have served as tail race cribbing, separating the tailrace (waste-water) area of the mill from the remainder of the stream channel.

There are several areas downstream along the east bank that have wood remains suggestive of additional structures, perhaps hydraulic in nature. Due to the limited scope of the project, they were given only cursory inspection. Although there were documentary references to a sawmill on the west bank, an inspection of c. 30 m (100 feet) of that bank below the crib dam revealed no visible features.

Summary

Substantial remains of the early 20th century Wilson mill dam survive in the Ocoee River, along with timber and stone constructions associated with the turbine penstock. Additionally, there is evidence of an earlier dam at the site, and joined timbers probably associated with early vertical water wheel installations are present below the extant mill house foundations.
Grist and Flour Milling in Polk County

No comprehensive history of Polk County has been written, although work on one is apparently in progress. Wooten (1949), in his history of neighboring Bradley County, discussed in a very brief manner the grist mills of that county. This present attempt at summarizing the outlines of milling in Polk County should be considered only a first approximation of the frequency, distribution and character of that industry. Due to the limited scope of this project, there was no intensive effort to collect data on all Polk County grist and flour mills. The data summarized below were generated by the collection and collation of usually brief and nominal references to mills found in secondary and primary documents. For example, numerous mills are mentioned in the Clemmer scrapbooks and a few are discussed in some detail. Polk County deed book indexes for the period 1916 to 1938 contained brief descriptions of the deed transactions, and these indexes were scanned for references to mills. Several Tennessee business directories and gazeteers were examined for mention of Polk County mills, and secondary sources such as Barclay's Ducktown Back in Raht's Time (1946) frequently contained references to mills. The 1880 Census of Manufactures, Special Schedule 7, for grist and flour mills, was also reviewed.

The data gathered on Polk County mills are summarized in Table 2. The list of mill seats cannot be considered exhaustive, and it cannot be assumed that all mills were water-powered (although we did not identify any steam-powered mills among those presented in Table 2). As evident in Table 2, on many mills we have no more data than a single name.

Grist and flour mills were basically processing centers, rendering grains and cereals into usable form, either for human consumption or for livestock feed. The frequency and distribution of mills was determined first and foremost by the agricultural production of an area and secondly by transportation networks. Generally, there were two types of mills, differentiated by the nature of their consumer market. Custom mills existed to provide a service to a number of surrounding farmers, and in many cases large farms included a grist and/or flour mill as part of the operation. At the custom mill a toll in grain was charged in payment for the grinding. At merchant mills, the grain processed at the mill was owned outright by the milling company and the processed meal or flour was sold retail in established markets. As a rule, the merchant mills were larger and more highly capitalized (see Hunter 1979).

Polk County, comprised of 430 square miles of area, is largely mountainous, and its productive agricultural land is chiefly along stream and river channels, the principal rivers being the Ocoee, Conasauga and Hiwassee. During the nineteenth century, the agricultural production of the area was dwarfed by the timber resources and the nationally-famous mineral exploitations in the Ducktown-Copperhill area of the county. Nonetheless, there was a market for the output of grist and flour mills, although the majority of these mills appear to have been small custom mills.

The 1880 Census of Manufactures provides the only reliable data concerning the operations of Polk County mills in the nineteenth century. Table 1 presented the data on the two Schedule 7 reports found for Polk County (and reviewed on microfilm in Nashville). The data in Table 2 suggest that in the 1880s there were perhaps a dozen or more mills in Polk County, but apparently only the Scarbrough and Boyd (Wilson) mills met the criteria of producing $500 in profits per year. If our data are complete, this suggests that the remainder were small mills operating purely on a custom basis, and many were likely run by farmers grinding their own corn and wheat for their own consumption.
<table>
<thead>
<tr>
<th>MILL SEAT</th>
<th>ASSOCIATED NAMES</th>
<th>DATE OF CONSTRUCTION OR OPERATION</th>
<th>LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. James Harris</td>
<td>Crawford (?)</td>
<td>late 1800s</td>
<td>Springtown Creek, near Servilla</td>
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<tr>
<td>4. John Hilderbrand</td>
<td>Nep B. Dunn, Thomas J. Jenkins</td>
<td>c. 1807, 1871, early 1900s</td>
<td>Conasauga Creek, north of Hiwassee River</td>
</tr>
<tr>
<td>5. William Scarbrough</td>
<td></td>
<td>1800s (?)</td>
<td>Chestuee Creek, north of Hiwassee River</td>
</tr>
<tr>
<td>6. H. Fry (or Frey?)</td>
<td></td>
<td>1855</td>
<td>Fry's Branch</td>
</tr>
<tr>
<td>MILL SEAT</td>
<td>ASSOCIATED NAMES</td>
<td>DATE OF CONSTRUCTION OR OPERATION</td>
<td>LOCATION</td>
</tr>
<tr>
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<td>---------------------------------------------------</td>
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<tr>
<td>7. N. B. Witt</td>
<td>late 1800s</td>
<td>not known</td>
<td></td>
</tr>
<tr>
<td>8. William Howard</td>
<td>1880s</td>
<td>Conasauga River</td>
<td></td>
</tr>
<tr>
<td>9. George Harbison</td>
<td>1800s</td>
<td>Horton Branch</td>
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<td>10. Joseph Hannah</td>
<td>unknown</td>
<td>Fourmile Creek</td>
<td></td>
</tr>
<tr>
<td>11. John Gee</td>
<td>mid 1800s</td>
<td>Gee Spring, near Austral</td>
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<tr>
<td>12. John Davis</td>
<td>early 1800s</td>
<td>Davis or Mill Creek, near Coletown</td>
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</tr>
<tr>
<td>13. W. C. Kimsey</td>
<td>1846</td>
<td>Brush Creek, at Ducktown</td>
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<td>14. Davis</td>
<td>unknown</td>
<td>Towie Creek</td>
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<td>15. J. A. Picklesimer</td>
<td>early 1900s</td>
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<td>16. McJunkin</td>
<td>unknown</td>
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<tr>
<td>17. Prock</td>
<td>unknown</td>
<td>unknown</td>
<td></td>
</tr>
<tr>
<td>18. Moore Kyle</td>
<td>Civil War</td>
<td>at Ocoee</td>
<td></td>
</tr>
<tr>
<td>19. Boneyard (?)</td>
<td>1850s</td>
<td>Greasy Creek, above Parksville</td>
<td></td>
</tr>
<tr>
<td>20. Williams</td>
<td>1800s</td>
<td>Southwest quarter, Section 23, Range 2 east, fractional township 2 north</td>
<td></td>
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<tr>
<td>21. Rogers, Johnson and Brown</td>
<td>1880s</td>
<td>Benton</td>
<td></td>
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Table 2 (continued)

<table>
<thead>
<tr>
<th>MILL SEAT</th>
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<th>DATE OF CONSTRUCTION OR OPERATION</th>
<th>LOCATION</th>
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<tr>
<td>22.</td>
<td>John Evans</td>
<td>1880s</td>
<td>at Parksville</td>
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<td>23.</td>
<td>J. D. Vaugh</td>
<td>1880s</td>
<td>at Reliance</td>
</tr>
<tr>
<td>24.</td>
<td>Dunn and Company</td>
<td>1880s</td>
<td>at Rymer</td>
</tr>
<tr>
<td>25.</td>
<td>D. C. Haskins</td>
<td>1880s</td>
<td>at Rymer</td>
</tr>
<tr>
<td>26.</td>
<td>A. Higgins</td>
<td>1880s</td>
<td>at Copland</td>
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<td>27.</td>
<td>Swan Brothers</td>
<td>1880s</td>
<td>at Heliotrope</td>
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<td>28.</td>
<td>Dr. W. J. Copeland</td>
<td>1880s</td>
<td>at Fetzerton</td>
</tr>
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<td>29.</td>
<td>A. B. Hooper</td>
<td>1880s</td>
<td>at Servilla</td>
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<tr>
<td>30.</td>
<td>E. D. Stephen</td>
<td>1880s</td>
<td>at Servilla</td>
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</table>

Table 2 Notes, by mill seat number.
1) Originally powered by undershot wheel, then breast wheel. Turbine installed 1870s; roller milling process installed c. 1899; dam renewed and new turbine installed c. 1912. Mill demolished by 1940. 2) Presently site of TVA's Ocoee No. 1 Power-plant (hydroelectric). 3) Also known as "Maggie's Mill;" turbine driven and in operation in the 1920s. Source: Clemmer Scrapbooks. 4) Site of Columbus; mill ceased operation in 1922. 5) Known as "Chestatee Mills;" added roller process c. 1900. 6) Also known as Hilderbrand's Mill; supposedly built by Rose-Cate-Fry; destroyed by 1867 flood. Source: Lillard (1983). 7) Burned by arson in 1898. Source: Clemmer's Scrapbook 1:78. 8) Listed in Polk 1887. 9) Clemmer's Scrapbook 5:18. 10) Clemmer's Scrapbook 6:61. 11) Apparently two grist mills in immediate vicinity of Austral; Clemmer's Scrapbook 8:9. 12) Barclay 1946:25. 13) Lillard 1983. 14) Clemmer's Scrapbook 12:53b. 15-17) Deed index reference, period 1916-1938. 18) Used as Ocoee post office; Clemmer's Scrapbook 11:14c. 19) Lillard 1983. 20) Clemmer's Scrapbook 4:129. 21) Polk 1887. 22) Polk 1887. 23) Grist mill; Polk 1887. 24) Flour mill; Polk 1887. 25) Flour mill; Polk 1887. 26) Grist mill; Polk 1887. 27) Flour mill; Polk 1887. 28) Flour mill; Polk 1887. 29) Flour mill; Polk 1887. 30) Flour mill; Polk 1887.
But the absence on the 1880 schedules of some of the more established mills such as the one on the Ocoee at Parksville (discussed below) hints at some missing Schedule 7 reports.

In the Goodspeed History of Tennessee (1887) the following was noted:

The flour-milling industry of Tennessee in 1880 ranked above all other industrial enterprises both in the amount of capital invested and in the value of the products. At that time there were 990 flour and grist-mill establishments in the state....

(Goodspeed 1887:271)

The source of the total number of mills in Tennessee was the 1880 Census of Manufactures. The Goodspeed history also noted that "within the past few years the introduction of the more expensive roller-mills has had a tendency to drive out some of the smaller establishments, and the number of mills is decreasing somewhat (Goodspeed 1887:273).

Some mills (or mill seats) in Polk County have received considerable attention, but most remain relatively unknown. The earliest mill built in what is now Polk County was erected on Conasauga Creek about a mile north of the Hiwassee River. As a provision of the Dearborn Treaty with the Cherokees in 1806, a grist mill was to be constructed at a felicitous location within Cherokee territory. The German immigrant John Hilderbrand was dispatched by the government to construct the mill about 1807. In 1819, the Calhoun Treaty with the Cherokees ceded that area (north of the Hiwassee River) to the United States, and a frontier town named Columbus grew around the vicinity of the mill. With the Treaty of New Echota in 1835, the Cherokees were resituated in the west, and Polk County was eventually formed, including a strip above the Hiwassee taken from McMinn County. After removal, the town of Columbus—and the mill—were abandoned in favor of Benton to the south.

About 1871 N. B. Dunn erected a new mill at the site of the Hilderbrand Cherokee mill. In the early 20th century, the mill was operated by Thomas T. Jenkins until it closed in 1922. The re-occupation of an old mill seat or the continuous occupation of one is a recurring theme in Polk County mills. The Wilson mill seat was utilized continuously from 1847 to c. 1940, being owned by over a dozen individuals in nine decades. Another mill seat continuously (but variously) used was on the Ocoee River at Parksville. John and William Shields erected a mill there in the period 1835-1838. William Bryant purchased the mill in 1853 and shortly thereafter sold the mill to Samuel Parks. Lillard (1983) states that it was Parks who erected a new three-story mill at the mill seat. The industrialist J. E. Raht purchased the mill in 1868 as part of his commercial enterprises in the region. Photographs of the Parksville mill and mill dam appear frequently in the Clemmer scrapbooks, and both the mill house and the log crib dam probably closely resembled the Boyd-Wilson mill. The Parksville mill stood until 1910, when the Tennessee Power Company began erection of the hydro-electric power station now know as Ocoee No. 1. The Tennessee Valley Authority purchased the dam and power plant in 1939 (Martin 1956). There apparently was a smaller mill in the immediate vicinity of Parksville; in Matlock's The Rebirth of Parksville (1980) there are photographs of a small mill driven by an overshot wheel, standing in 1910.

A small mill in Polk County which received an inordinate amount of publicity in the 1920s and early 1930s was the Harris mill on Springtown (or simply Spring) Creek. This mill was reputed to have served as the inspiration for a popular song of the period, "When You and I Were Young, Maggie."
Maggie's Mill, as the site came to be known, was immortalized, but subsequent controversy surrounded the site: the songwriter's inspiration had evidently been a small mill in Ontario, Canada.

Water-powered grist and flour mills were a phenomenon of the nineteenth century. As Clark (1949:504) noted, "flour milling...has always been one of the country's largest and most widely distributed industries...." Milling was progressively taken over by large corporations operating state-of-the-art machinery. Roller milling, for instance, was introduced in the 1870s, but it was at the turn of the century that Wilson and William Scarbrough installed these devices in their respective mills. There were apparently no large merchant mills in Polk County. From the 1880 Census of Manufactures we noted that both Erby Boyd (at Wilson's mill) and William Scarbrough ground on a custom basis three-fourths of the time.

Reference to Polk County mills in Tennessee business directories through time partially reflects the relatively low level of milling activity in that county. In Mitchell's 1860-1861 Tennessee State Gazetteer and Business Directory there are entries for twelve towns in the county but not one reference to a mill. In Polk's directory for 1887 there are thirteen towns and twelve mills listed. In Young's 1907 directory there are apparently no mills listed for Polk County. Obviously there were many mills still active in the early 20th century, including the Wilson mill, but their absence from the directory is an indication of their lack of prominence as commercial enterprises.

Conclusions

While the research described within this report was relatively limited in scope and not exhaustive from a historical or archaeological point of view, the data are sufficient to serve as a cogent summary of the history of one particular mill seat and the first, preliminary outline of milling in Polk County.

The Rose-Boyd-Wilson mill was one of the more prominent grist and flour mills in Polk County. The mill's proximity to the Ocoee River ford and later, the steel highway bridge, linked the milling operation to the local economy. The mill provided a processing service to its owners (who themselves raised corn and cereals) and to other local farmers for nine decades. The mill was also the site of baptizings for most of its history, connecting the site with the social and religious affairs of the local community. While the technology employed at the site through time was probably average for mills of its size, the continuous use of the mill seat and the documented progression from undershot to breast wheel to turbine power, and the shift from burrstone to roller milling, mark the site as reflecting the general evolution of milling in East Tennessee.
Figure 1. Detail from a 1908 land plat. This plat accompanied the deed transferring a strip of land from Wilson's farm to the county for a road right-of-way.

Figure 2. Detail from a 1920 land plat. This plat accompanied the sale of the water power rights of Wilson's mill to the Tennessee Power Company. The structure adjacent the mill was evidently a warehouse. The small square at the east end of the dam appears to represent a turbine penstock. The old mill ford is shown at the top of the plat.
EXHIBIT A

PLAN SHOWING LOCATION OF PROPOSED OCOEE RIVER BRIDGE AT WILSON'S MILL, POLK COUNTY, TENN. JULY 10, 1908

Scale: 1" = 100'
Figure 3. Detail from the 1935 edition USGS Benton Quadrangle map. This detail illustrates the mill house and several residences in the immediate vicinity. A portion of the unimproved road on the east bank survives today as a farm road.

Figure 4. View of the dam remains on the east side of the river channel. Although obscured by debris, the line of the early dam can be seen in the foreground, above the more substantial rock-filled, timber crib dam.
Figure 5. Planview of the Wilson Mill Dam site. This plan illustrates the general configuration of the archaeological remains at the site; some details have been omitted for clarity.
Figure 6. Example of a debris dam. Taken from James Leffel's *Construction of Mill Dams* (1881:45), this plate illustrates the type of low head dam used originally at the Wilson site. The dam is composed of stone, logs and brush.

Figure 7. Example of a timber crib dam. Although not identical in construction to the Wilson mill dam, this example of a timber crib dam shows the essential construction techniques and features of dams of this variety. Taken from James Leffel's *Construction of Mill Dams* (1881:12).
BRUSH, STONE AND GRAVEL DAM.

A SAFE AND ECONOMICAL DAM.
Figure 8. Detail of log crib, west dam remnant. This view illustrates the general arrangement of stringers and cross-pieces along the trailing edge of the west dam remnant. Drift pins mark the location of the top level of cross-pieces, which have rotted away. Facing south; scale in 50 cm zones.

Figure 9. Plank revetting on the dam face. This view, from the west dam remnant, illustrates (at the lower left) the plank revetting nailed to the uppermost tier of cross-pieces, forming the finished face of the dam. Facing northwest; scale in 50 cm zones.
Figure 10. Sheet piling along the leading edge of the dam. This view, taken at the east end of the west dam remnant, shows the exposed tops of the plank sheet piling nailed to the leading edge of the dam to prevent undercutting. Scale in 10 cm zones.

Figure 11. Detail of the trailing edge of the crib dam, east remnant. This view demonstrates the variability in timber size and staging in the stringer courses along the dam's trailing edge. Facing south; scale in 50 cm zones.
Figure 12. Detail of the dam face, east remnant. The splayed (in a vertical axis) arrangement of cross-pieces nailed to the leading edge stringer timber is apparent in this view. The protective sheet piling is absent. Facing northwest; scale in 50 cm zones.

Figure 13. Small crib adjacent penstock. Although the upper logs in the small rock filled crib are in disarray, the general form of the small crib is shown. Much of the stone debris in the foreground apparently once filled a crib between the small penstock crib and the main crib to the west. Facing southeast.
Figure 14. Planview of small crib and turbine penstock area. The penstock floor (A) and the wastewater egress aperture (B) rested on a series of heavy joists (C) supported by stringer timbers. The joists were mortised to receive heavy square uprights. Surrounding the small stone crib adjacent the penstock was a shell of timber resting on smaller joists (D) also supported the stringer timbers. On the west, four square upright posts still remained; two are marked E. The log crib (F) was set inside the sawn timber shell, and contained heavy stone debris anchoring the crib and penstock to the river bed.
Figure 15. The northwest mill house foundations. Set into the steep bank of the river, this limestone pier supported the sill timbers of the mill house, the west side of which extended out over the river bank. Facing northeast; scale in 50 cm zones.
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