

NATIONAL REGISTER OF HISTORIC PLACES
INVENTORY - NOMINATION FORM

(Type all entries - complete applicable sections)

STATE: North Carolina
COUNTY: Catawba
FOR NPS USE ONLY
ENTRY DATE

1. NAME

COMMON:
Powell-Trollinger Lime Kilns

AND/OR HISTORIC:

2. LOCATION

STREET AND NUMBER:
About 250 yds. from end of S.R. 1886 (north of junction of S.R. 1886 and
CITY OR TOWN: S.R. 1813) CONGRESSIONAL DISTRICT: Tenth
Maiden vicinity The Hon. James Broyhill

STATE North Carolina	CODE 37	COUNTY: Catawba	CODE 035
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3. CLASSIFICATION

CATEGORY (Check One)	OWNERSHIP	STATUS	ACCESSIBLE TO THE PUBLIC
<input type="checkbox"/> District <input type="checkbox"/> Building <input type="checkbox"/> Site <input checked="" type="checkbox"/> Structure <input type="checkbox"/> Object	<input type="checkbox"/> Public <input checked="" type="checkbox"/> Private <input type="checkbox"/> Both	Public Acquisition: <input type="checkbox"/> In Process <input type="checkbox"/> Being Considered	<input type="checkbox"/> Occupied <input checked="" type="checkbox"/> Unoccupied <input type="checkbox"/> Preservation work in progress
PRESENT USE (Check One or More as Appropriate)			
<input checked="" type="checkbox"/> Agricultural <input type="checkbox"/> Commercial <input type="checkbox"/> Educational <input type="checkbox"/> Entertainment	<input type="checkbox"/> Government <input type="checkbox"/> Industrial <input type="checkbox"/> Military <input type="checkbox"/> Museum	<input type="checkbox"/> Park <input type="checkbox"/> Private Residence <input type="checkbox"/> Religious <input type="checkbox"/> Scientific	<input type="checkbox"/> Transportation <input type="checkbox"/> Other (Specify) _____ _____ _____
		<input type="checkbox"/> Comments	_____

4. OWNER OF PROPERTY

OWNER'S NAME:
Mr. Ray H. Bollinger

STREET AND NUMBER:
1059 Fourth Avenue, N.W.

CITY OR TOWN: Hickory	STATE: North Carolina	CODE 37
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5. LOCATION OF LEGAL DESCRIPTION

COURTHOUSE, REGISTRY OF DEEDS, ETC:
Catawba County Courthouse

STREET AND NUMBER:

CITY OR TOWN: Newton	STATE: North Carolina	CODE 37
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6. REPRESENTATION IN EXISTING SURVEYS

TITLE OF SURVEY:

DATE OF SURVEY: Federal State County Local

DEPOSITORY FOR SURVEY RECORDS:

STREET AND NUMBER:

CITY OR TOWN:	STATE:	CODE
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7. DESCRIPTION

CONDITION	(Check One)					
	<input type="checkbox"/> Excellent	<input type="checkbox"/> Good	<input checked="" type="checkbox"/> Fair	<input type="checkbox"/> Deteriorated	<input type="checkbox"/> Ruins	<input type="checkbox"/> Unexposed
	(Check One)			(Check One)		
	<input checked="" type="checkbox"/> Altered	<input type="checkbox"/> Unaltered	<input type="checkbox"/> Moved	<input checked="" type="checkbox"/> Original Site		

DESCRIBE THE PRESENT AND ORIGINAL (if known) PHYSICAL APPEARANCE

The three remaining Rowell-Trollinger Lime Kilns stand in the midst of a pine forest farm. When approached from the closest existing road, the kilns, which are built into the side of a hill, are all but invisible. This is because kilns were loaded from the top with alternating layers of cord wood and limestone, and having the large circular openings so that wagons could be driven right to them eliminated a great deal of labor. Therefore, all that is visible from the upper side are the rock-lined, circular openings in what appears to be the ground. (Originally there were three of these openings but one furnace was partially and another completely dismantled by scavengers seeking the stone.)

Viewed from the lower side, the furnaces are far more impressive. A solid stone wall which is approximately twenty or thirty feet in height extended the length of the three furnaces, providing a common front. The center furnace remains perfectly intact; the one to the left has suffered some damage and the one to the right has been destroyed. The stone wall consists of large blocks of stone having been fitted together in a random pattern with small ones used to fill in the gaps. At the bottom, at the center of each intact furnace, is a small rectangular opening, several feet high and just wide enough to give easy access to a man using a shovel. This is where the lime is removed after the cord wood had burned out completely, leaving the lime. This process is said to have taken several days, after which fresh layers of cord wood and limestone were once again loaded into the furnaces to start the process all over again.

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8. SIGNIFICANCE

PERIOD (Check One or More as Appropriate)

- Pre-Columbian | 16th Century | 18th Century | 20th Century
 15th Century | 17th Century | 19th Century

SPECIFIC DATE(S) (If Applicable and Known)

AREAS OF SIGNIFICANCE (Check One or More as Appropriate)

- | | | | |
|---|---|--|--|
| <input type="checkbox"/> Aboriginal | <input type="checkbox"/> Education | <input type="checkbox"/> Political | <input type="checkbox"/> Urban Planning |
| <input type="checkbox"/> Prehistoric | <input type="checkbox"/> Engineering | <input type="checkbox"/> Religion/Philosophy | <input type="checkbox"/> Other (Specify) |
| <input type="checkbox"/> Historic | <input type="checkbox"/> Industry | <input type="checkbox"/> Science | _____ |
| <input type="checkbox"/> Agriculture | <input type="checkbox"/> Invention | <input type="checkbox"/> Sculpture | _____ |
| <input type="checkbox"/> Architecture | <input type="checkbox"/> Landscape Architecture | <input type="checkbox"/> Social/Humanitarian | _____ |
| <input type="checkbox"/> Art | <input type="checkbox"/> Literature | <input type="checkbox"/> Theater | _____ |
| <input type="checkbox"/> Commerce | <input type="checkbox"/> Military | <input type="checkbox"/> Transportation | _____ |
| <input type="checkbox"/> Communications | <input type="checkbox"/> Music | | _____ |
| <input type="checkbox"/> Conservation | | | _____ |

STATEMENT OF SIGNIFICANCE

The Powell-Trollinger Lime Kilns were part of a lime-producing operation begun shortly after the Civil War by Dr. Avery M. Powell, a wealthy industrialist of diversified interests. The kilns, bought in 1877 by Moses Trollinger, continued to operate until the twentieth century. The large stone structure, including two of the three kilns, is a rare and still-impressive vestige of a small local industry typical of the nineteenth century industrial character of the state.

The Powell-Trollinger Lime Kilns, known also as the "Old Limestone Quarry of Catawba County," began operations soon after the Civil War under the ownership of Dr. Avery M. Powell, a wealthy physician and planter said to have been originally from Lenoir. Dr. Powell acquired a one-half undivided interest in the ninety-acre tract from C. F. Conner in December, 1865, and with a partner purchased an additional one-third undivided interest in August, 1866. Before Powell acquired the property it had been part of a 200-acre land grant originally made to William Fish in 1800. The original tract remained in the possession of the Fish family until November, 1865, when a group of heirs sold the ninety-acre portion to Conner.

Before acquiring this property Powell had built the Long Island Cotton Mill on the Catawba River and, in partnership with his father-in-law, John Shuford, had operated the Granite Shoals Cotton Mill. These plants, both located near the town of Catawba Station (now Catawba), were the earliest textile enterprises in Catawba County, dating from about 1839. Powell also served as president of the Western North Carolina Railroad Company from 1860 to 1865. The census of 1860 reveals that Powell, then forty-one years old, was the third wealthiest man in the county, owning at that time lands valued at \$22,000 and personal property worth \$14,650. He was listed as a "Physician" and was the father of ten children. The 1870 census lists him as a "Manufacturer" and credits him with the ownership of real property worth \$17,250.

At about the time he purchased the limestone tract, Powell, in partnership with James H. Sherrill, opened a general store at Catawba Station. He later acquired a gold mine and a grist mill, joined with industrialist Samuel McDowell Tate in the manufacture of cotton yarns and sheetings, opened a cotton goods store, and became president of the Catawba Manufacturing Company, another early textile firm. He was known throughout his career as "one of Catawba's most enterprising gentlemen."

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8. A

At the time Powell embarked upon the production of lime, no true lime "industry" can be said to have existed in North Carolina. As early as 1825 Professor Denison Olmsted of the University of North Carolina wrote that limestone was being burned to produce lime in Stokes and Surry counties and appealed for the exploration of additional limestone deposits and for more efficient methods of producing and preserving the finished product. Olmsted reasoned that these steps would result in benefits to the public, as "it would tend to extend the use of a substance, the want of which is so manifest in most of the architectural structures of this country." In 1852 State Geologist Ebenezer Emmons reported to Governor David S. Reid that

The great value and importance of limestone has created a demand for it, both as an article essential in construction, as well as in agriculture. In a very large part of North Carolina, this rock seems to be absent, and hence it has been difficult to supply lime sufficient . . . to meet the ordinary wants of the community.

It is important here to distinguish between "limestone" and "lime." "Limestone is a loosely used term that has been applied to a wide range of rocks that yield lime (CaO) when burned." Lime, the final product of this burning process and a key ingredient in plasters and mortars, is "the residue left after burning limestone at a temperature of about 900° C. or 1652° F. to drive off carbon dioxide." Most of the lime produced by this process was used strictly on a local basis in the building trade. "Production for local demand was a feature of the lime industry before the development of railroad facilities, improved methods of manufacture and increased cost of operations rendered production on a small scale by crude methods impractical."

Until about 1904, when the Blue Ridge Lime Company was established near Fletcher, nearly all of North Carolina's lime production was achieved by the crude method of heating quantities of crushed limestone in small wood-fueled kilns until the carbon contained in the lime-bearing "ore" had been burned off, leaving relatively pure calcium oxide, or lime. Many of these primitive "backyard furnaces" existed throughout North Carolina before the Civil War. Professor Emmons reported in 1852 that he had visited two "well known localities of limestone" in Stokes County belonging to a Mr. Bolejack and a Mr. Martin, respectively. Included in this report was a letter from a Dr. S. McClenahan, who noted that "lime in great abundance, and of excellent quality, is found stretching across the State, from Danbury, in Stokes County, to Kings Mountain. . . ." This observer then enumerated five lime kilns he had personally visited, and asserted that "all the lime I saw at all the kilns appeared to be of good quality." No reference could be found to the relative merits of the limestone deposits found in the vicinity of the Powell quarry, but two geologists writing in 1906 noted that "a great deal of the stone will burn to a good grade of lime, and for this purpose it is of considerable economic importance." Other lime kilns existed before the Civil War in Yadkin, Wayne, and Wake counties.

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8. B

In February, 1869, Powell and his wife sold to George W. Swepson, a prominent industrialist and financier of the Reconstruction era, a one-half undivided interest in the "Lime Kiln tract." Also included in this conveyance was a half-interest in the "mules waggons oxen carts tools fixtures &c Connected with the lime kiln. . . ." Exactly how long the kiln had been in operation before this date is uncertain, but the deed refers to it as a going concern. During this early period the kiln was reported to be "making 100 tons /of lime/ per month." The industrial census of 1870 reveals that the Powell quarry was at that time yielding 600 tons of limestone annually, which was being converted to 4,800 pounds of pure lime per year by the kilns. This process consumed 1,200 cords of wood annually.

Powell and Swepson continued to operate the furnace or furnaces (it is not clear when the other two kilns were added) until March, 1877, when they sold a 283½-acre tract including the kiln or kilns to Moses B. Trollinger for \$1,978. In the deed of conveyance Powell and Swepson reserved the right to remove from the premises "the Rock Comprising the ten new Lime Kilns." What this clause refers to is uncertain, but it suggests that Powell and Swepson were at some point entertaining plans for a massive expansion of their enterprise. After a highly successful career as an industrialist, Powell died on March 22, 1888. No evidence could be found to indicate that he ever held a public office.

Trollinger owned and operated the lime kilns from 1877 until his death about 1888. He may have been employed by Powell and Swepson before purchasing the kiln property, as the census of 1870 shows his occupation as "Mine Manager." The 1880 census lists him as a farmer. Although never the influential figure that A. M. Powell was, Trollinger served as a Catawba County Commissioner from 1878 to 1880 and from 1882 to 1884. Branson's North Carolina Business Directory reveals that Trollinger's widow Susan operated the lime kilns under her name from about 1889 until at least as late as 1896. Unfortunately, no production records could be located for any period after 1870.

In 1903 Moses Trollinger's estate was divided by the Catawba County Superior Court, with Mrs. Trollinger receiving a 100-acre tract including the lime furnaces. The tract was valued by the court at \$600. A report made for the North Carolina State Geologist in 1917 indicated that one of the three existing kilns had been in operation as late as the previous year and was still in reasonably good condition. Mrs. Powell died or otherwise disposed of the lime kiln tract sometime before 1920. In that year L. A. Rudisill and his wife conveyed to D. M. Carpenter a 100-acre tract "being lot No. 1 in the division of the lands of M. B. Trollinger. . . ." Carpenter died in 1944 and in 1959 his heirs conveyed to Ray H. Bollinger, the present owner, a 77.56-acre portion of the original tract.

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9.

Catawba County Records, Catawba County Courthouse, Newton, North Carolina (Subgroups: Deeds).

Catawba County Records, Division of Archives and History, Raleigh, North Carolina (Subgroups: Deeds).

Kerr, Washington C. Report of the Geological Survey of North Carolina. 2 volumes; Raleigh: Josiah Turner, 1875; P.M. Hale and Edwards, Broughton and Company., 1881.

Laughlin, G. F.; Berry, E. W.; and Cushman, J. A. Limestones and Marls of North Carolina. North Carolina Geological and Economic Survey Bulletin No. 28. Raleigh: Edwards and Broughton Printing Company, 1921.

Lefler, Hugh Talmage, and Newsome, Albert Ray. North Carolina: The History of a Southern State. Third Edition; Chapel Hill: University of North Carolina Press, 1973.

Lincoln County Records of Land Grants, Lincoln County Courthouse, Lincoln. Papers on Agricultural Subjects and Professor Olmsted's Report on the Geology of Part of the Western Counties of North Carolina. Raleigh: State Board of Agriculture, 1825, Part II.

Piedmont Press (Hickory). July 10, 1880.

Preslar, Charles J., Jr., ed. A History of Catawba County. n.p.: Catawba County Historical Association, 1954.

Press and Carolinian (Hickory). Obituary, March 29, 1888.

Report of Professor Emmons, on his Geological Survey of North Carolina. Raleigh: Seaton Gales, 1852.

U. S. Census Office. Eighth Census of the United States, 1860; Ninth Census of the United States, 1870; Tenth Census of the United States, 1880: Catawba County, North Carolina, Population Schedules.

Watson, Thomas L., and Laney, Francis B. The Building Stones of North Carolina. North Carolina Geological Survey Bulletin No. 2. Raleigh: E. M. Uzzell, 1906.

Young, Marjorie, ed. Textile Leaders of the South. Anderson, South Carolina: James R. Young, 1963.

9. MAJOR BIBLIOGRAPHICAL REFERENCES

Research by Robert Topkins, survey specialist; architectural description by Charles Greer Suttlemyre, Jr., survey specialist, Ashe, Samuel A., and others, eds. Biographical History of North Carolina: From Colonial Times to the Present, 8 volumes; Greensboro: Charles L. Van Noppen, 1905-1917.

Branson, Levi, ed. North Carolina Business Directory. Raleigh: 1869-1896.

Conrad, Stephen G. Crystalline Limestones of the Piedmont and Mountain Regions of North Carolina. North Carolina Department of Conservation and Development Bulletin Number 74. Raleigh: North Carolina Department of Conservation and Development, 1960.

10. GEOGRAPHICAL DATA

LATITUDE AND LONGITUDE COORDINATES DEFINING A RECTANGLE LOCATING THE PROPERTY			O R	LATITUDE AND LONGITUDE COORDINATES DEFINING THE CENTER POINT OF A PROPERTY OF LESS THAN TEN ACRES		
CORNER	LATITUDE	LONGITUDE		LATITUDE	LONGITUDE	
	Degrees Minutes Seconds	Degrees Minutes Seconds		Degrees Minutes Seconds	Degrees Minutes Seconds	
NW	° ' "	° ' "		35° 39' 11"	81° 03' 52"	
NE	° ' "	° ' "				
SE	° ' "	° ' "				
SW	° ' "	° ' "				

APPROXIMATE ACREAGE OF NOMINATED PROPERTY: 5 acres

LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES

STATE:	CODE	COUNTY:	CODE

11. FORM PREPARED BY

NAME AND TITLE:
Survey and Planning Unit

ORGANIZATION: Division of Archives and History DATE: 11 October 1974

STREET AND NUMBER:
109 East Jones Street

CITY OR TOWN: Raleigh STATE: North Carolina CODE: 37

12. STATE LIAISON OFFICER CERTIFICATION

NATIONAL REGISTER VERIFICATION

As the designated State Liaison Officer for the National Historic Preservation Act of 1966 (Public Law 89-665), I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the National Park Service. The recommended level of significance of this nomination is:

National State Local

Name Robert E. Stipe
Title State Historic Preservation Officer

Date 11 October 1974

I hereby certify that this property is included in the National Register.

Director, Office of Archeology and Historic Preservation

Date _____

ATTEST:

Keeper of The National Register

Date _____

SEE INSTRUCTIONS

