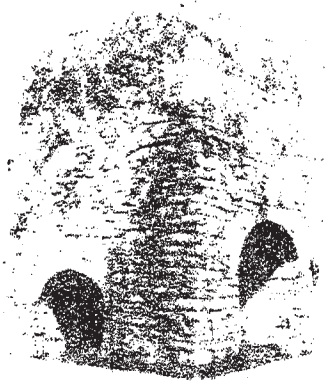
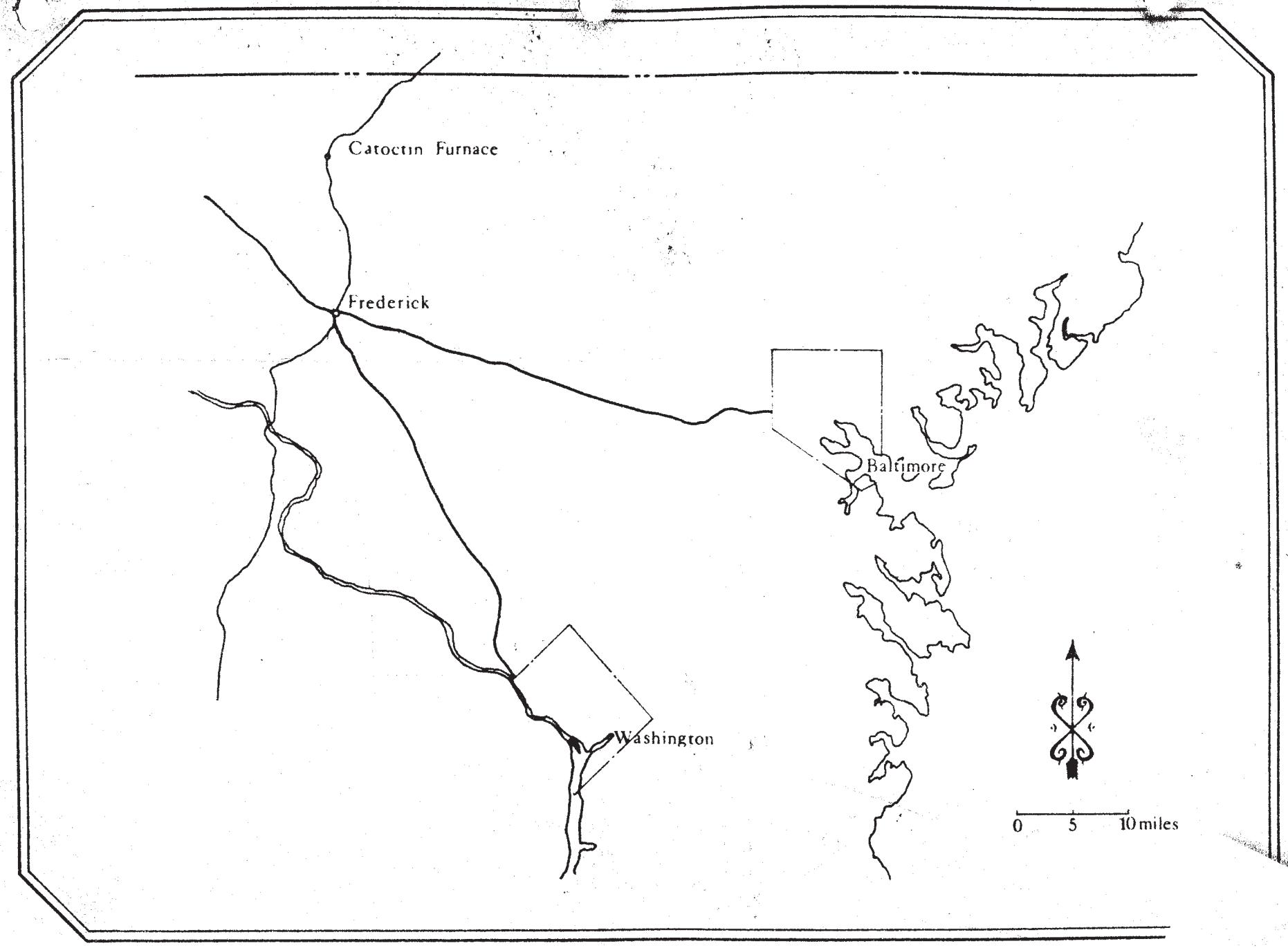


CATOCTIN FURNACE

HISTORICAL RESEARCH

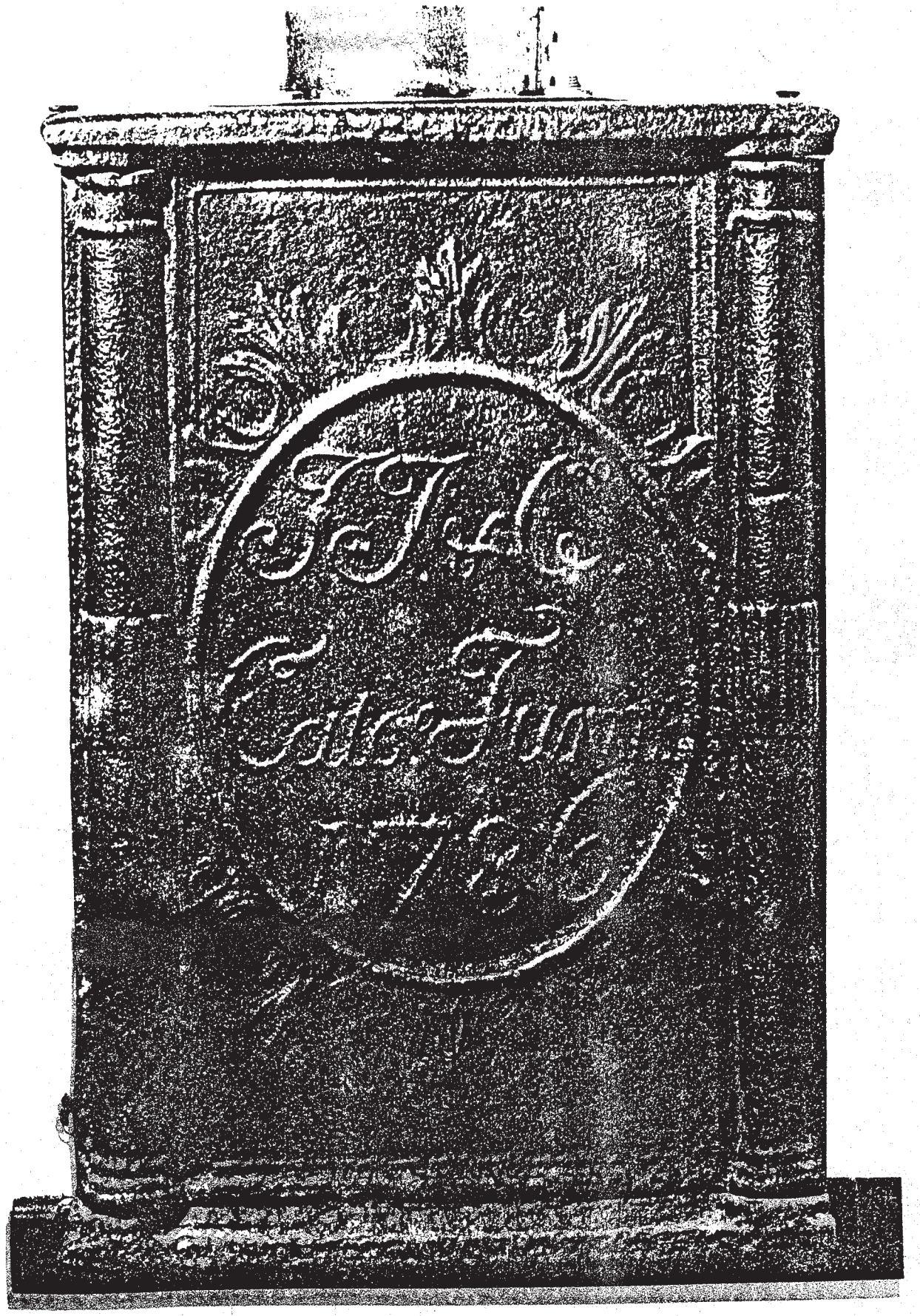
A Preliminary Study

Catoctin Furnace in relation to the Potomac River, markets, and the Pennsylvania State Line. The roads are modern highway routes.


Catoctin Furnace
Frederick
Baltimore
Washington
0 5 10 miles

Back plate of a Catoctin stove, 1786, produced by James Johnson & Co. at Catoctin Furnace, Frederick County, Maryland. The six-plate stove now in the collection of Old Salem, Inc., North Carolina, was found in Mint Spring, Virginia, a mountain settlement south of Staunton and 150 miles southwest of Catoctin Furnace.

Photo courtesy Old Salem, Inc., Winston-Salem, North Carolina



ACKNOWLEDGMENTS

A project concerning the growth, development and eventual decline of a particular industry in a specific location is not actually subject to the geographical limitation it may suggest. The data obtained in the Catoctin Study is the result of the generous aid and direction of institutions and individuals ranging from New York, south to North Carolina and west to Wisconsin and New Mexico. Special thanks as due to those individuals whose patience and generosity were tried to great lengths. Listed alphabetically these include Mr. G. Eugene Anderson, President, Catoctin Furnace Historical Society; Mr. Tyler Bastian, State Archaeologist; Mr. Robert Bushnell, Maryland Department of Natural Resources; Mrs. Frank Cantwell, a Director of Catoctin Furnace Historical Society, and Mr. Joseph Prentice, Industrial Archaeologist, National Park Service, retired. Perhaps the most involved respondent was Mr. William Renner, son of an early photographer of the furnace property and long-time village resident to whom we returned for four visits after we first met him in August.

Other local residents of the Catoctin area not only were most hospitable during our several extended visits to Frederick, but they also unstintingly shared private collections relative to furnace or family history. At the risk of duplication in other sections of this report, mention should be made of the kindness and generosity of Mr. & Mrs. Robert Dodge, Mr. & Mrs. Clement Gardner, Mr. & Mrs. Charles W. Ross, III and Mr. Curtis Shuff. Mr. Charles Nicodemus, President, Mutual Insurance Company of Frederick County made available records of that organization, a Frederick business since 1844.

It is understood that the contract could not have been effective without the interest and cooperation of the courteous and knowledgeable staffs of

of the various facilities whose collections were used. Rather than incorporating a lengthy directory within the introduction, a list of particular contributors is contained in the "Sources".

The delicate horns and harp motif used on the title page is taken from a "Brien" cast-iron fireplace liner in the home of Charles W. Ross, 105 Council Street, Frederick, Maryland, built by John McPherson after 1815.

CATOCTIN IRON FURNACE
CUNNINGHAM FALLS STATE PARK
Thurmont, Maryland

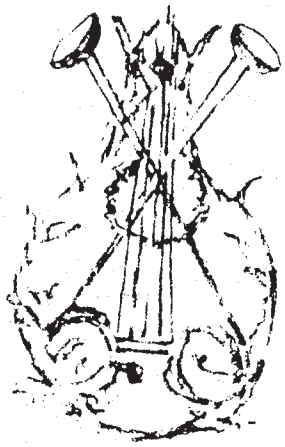
A REPORT ON AN HISTORICAL SURVEY

prepared for

THE STATE OF MARYLAND
DEPARTMENT OF NATURAL RESOURCES
LAND PLANNING SERVICES

by

NATIONAL HERITAGE CORPORATION
WEST CHESTER, PENNSYLVANIA



DECEMBER, 1975

TABLE OF CONTENTS

Introduction

A comprehensive search for information pertaining to the socio-economic history of Catoctin Furnace, Frederick County, Maryland, was undertaken from July to December, 1975 by National Heritage Corporation at the request of the State of Maryland, Department of Natural Resources. While the project involved the staffs of major depositories as well as personnel in the planning and industrial technology divisions within National Heritage, the major effort was the responsibility of Alice Kent Schooler and Bernard Herman in research and Michael Lynch in mapping, all working under the general supervision of John D. Milner, President.

This report is an expanded version of an interim report submitted September 23, 1975. At that time, a meeting was held in the office of Mr. Robert Bushnell, Office of Planning and Design, Department of Natural Resources, at which representatives of the Maryland Historical Trust and the Maryland Park Service were present with Mr. Milner and Mrs. Schooler.

As the summary of the research thus far accomplished, this report represents the conclusion of an intensive survey conducted preliminary to any further work at the Furnace site. The report is to be considered adjunct to a singular boxed, indexed card catalogue. Containing over 1,000 items, this catalogue identifies pertinent material gathered from documentary and secondary sources. In addition, significant collateral material referring to iron history has been inserted in order to give a perspective to the history of Catoctin. Recognizing also the contributions of tradition and oral history as well as previous study, the catalogue includes material obtained from residents of the area and the several scholars and specialists contacted by the research team. Filed also are sources which were found to have no reference to Catoctin, included for their value as negative information.

Although the program undertaken by National Heritage was the accepted

alternative to that first suggested by the client, it has been conducted in accordance with the original suggestions incorporated in the scope of work as set forth by the Department of Natural Resources, February 20, 1975. Using these guidelines the research team set up a schedule which alternated days of travel with in-office days of analysis and plan. Thought also had to be given to the time of year.

The summer, and most especially the month of August, is traditionally a time when private depositories are closed. This year the problem of inaccessibility was enlarged by the two-month closing of the Maryland Historical Society, a major source of periodical material as well as important business collections. As a result, the summer months were used for reviewing secondary material and studying the further possibilities contained in the National Union Manuscript Catalogue. Interviews were conducted in Frederick and Land and Probate Records at the Frederick County Courthouse were studied. Mr. Frank Mentzer, former superintendent at Catoctin Mountain National Park, was interviewed by Michael Allen; the field work of Dr. Kenneth Orr was visited by Allen Steenhusen. At the Archives of the Pennsylvania Historical and Museum Commission the records of Pine Grove Furnace were studied as were unidentified account books of the Adams County area. Dissertations, theses and term papers dealing with subjects which suggested Catoctin were read; work at the National Archives Record Service was begun, and correspondence was initiated with other major depositories whose collections were mentioned in the scope of work. Attention was given to bibliographies of the other recent work (Contract Archaeology, 1971; Bastian, 1973; Robbins, 1973).

September through November were an encouraging period. The work involved search of more public records, newspapers, personal collections and the documentary contents of large collections in major depositories. While all personal papers opened to study were exhausted and early newspapers collected on microfilm were read thoroughly, limited search was required when relatively unindexed collections had up to 70,000 items. In collections of this sort, boxed chronologically, certain decades which suggested Catoctin's possible association were studied in depth. In some

cases only the calendars, catalogues and guides were used. With the exception of McPherson papers and the McCormick Papers, both of which contain material pertaining to the 1820-1840 era, it has generally been found that major private collections dealt with the period in which Catoctin achieved its greatest growth, 1850-1890. Public records and the statistical data of the iron industry as a whole were found to be strongest in the same period. There was a weakness in the era from 1785-1820.

The bibliography included in this report illustrates more fully the range of material involved in the survey. With the understanding that it is the card catalogue which supplies the direct data, a brief chronological review of some useful information, with references limited to a few parenthetical citations, follows. Deed books and Probate Records cited are Frederick County records; patents are State of Maryland records.

The Survey

THE BEGINNING: 1770-1780

The history of Catoctin begins with a 1770 patent, recorded as "The Mountain Tract", issued to Benedict Calvert and Thomas Johnson (BC+GS:42,3). By this record, a total of 1,715 acres were awarded to Benedict Calvert and Thomas Johnson "for the purpose of Erecting and Building an Iron Works". As recorded in an 1803 deed (WR24;435), more land was acquired in 1776. This included "Good Will", 150 acres originally surveyed to Charles Carroll of Annapolis in 1752 and "Stoney Park", 100 acres surveyed in 1760. For these tracts, Thomas Johnson, as representative of James Johnson and Company, was to pay 100 tons of pig iron. The condition of payment together with the 1803 notation that a furnace had been erected on "Good Will" are the strongest land-records evidence for dating an iron operation at Catoctin on or after 1776.

The Mountain Tract and its associated lands were a promising investment for the wealthly Johnson family who were established land speculators. The removal of government restrictions at the outbreak of the Revolution encouraged such new development in the iron industry. Not only did the domestic market, cut off from foreign supply, have its usual needs but the newly organized military also had a major need for munitions. If Catoctin were typical of other newly organized ironmaking endeavors, it probably tried to produce whatever the market required.

Study of the period in which Catoctin was first put into blast has been expedited by the newly available computer printout of the manuscripts commonly known as the Papers of the Continental Congress, 1774-1789 (RG247,NARS). Currently being processed by the Center for Documentary Study of the American Revolution within the National Archives, this project has available for limited use a two-part index of the papers. An initial readout on iron, furnaces, ironworks, and Johnson found four manuscripts relating to Catoctin or the Johnsons as ironmasters. Four

documents were found in a similar manner in the Miscellaneous Numbered Records in the War Department Collections of Revolutionary War Records (RG93,NARS). In Record Group 93, Documents 29632 through 29634 establish that James Johnson & Co., on September 1, 1780 contracted with the Board of War to prepare for casting ten-inch shells. For all shells delivered at Baltimore Town "which shall be good" Johnson was to be paid £50.

On October 28, 1780 George Dent, as keeper of the accounts and contractor of business for James Johnson & Co., swore that he was privy to the shipping of 30 loads of bombshells (158 ten-inch shells) from Catoctin. David Poe, in Baltimore swore he received several hauls amounting to more than 31 loads.

In an undated memorial to Congress, Thomas, Baker and Roger Johnson, operating as B. Johnson & Co. [?] mention that "a considerable part of said Shells were made use of in the seige of York". They claimed that, because some of the shells (then still in Baltimore) may have been faulty, the company had not been paid for the shipments.

JAMES JOHNSON & COMPANY - LATER YEARS (1780-1793)

While the furnace was still under the control of the founding company, it is said also to have produced material for James Runsey's steamboat, first tried in the Potomac at Sheperdstown in the spring of 1786. The interest of Thomas Johnson in Rumsey's work is widely published, but Rumsey (1788:67) cites a letter of December 18, 1787 from Thomas Johnson to Rumsey which states that an attempt to cast cylinders "at my brother's and my works" did not succeed.

In later attempts of his family to secure credit for Rumsey as the inventor of steam navigation (House Report 317, 1837), the continued involvement of the Johnsons is evidenced by the fact that the counsel was James Johnson of Baltimore.

In 1788 Thomas Johnson purchased more real estate for the furnace and four negro slaves (WR8:286), suggesting the furnace was developing. Despite its early production problems, Alexander (1840:78) mentions that a new furnace was erected in 1787, "about three forths of a mile further up Little Hunting creek, and nearer the ore banks". This is a key statement which has been open to interpretation by everyone interested in the site in the last 65 years, but Alexander's informant, the same James Johnson mentioned previously, was himself a secondary source. The place was in working order, however. The fact that James Johnson & Co. produced stoves as early as 1786 is exhibited by the documented stove now in the possession of Old Salem, Inc., Winston-Salem, North Carolina. Early maps such as the Griffith map (1795) do not identify Catoctin, but Aetna Glass Works is shown. No information for the decades from 1790 to 1810 has been found.

BAKER JOHNSON - 1793-1813

Granted a warrant of resurvey in 1804, Baker Johnson patented twelve tracts totalling 934 acres in the name of "Auburn" (1C#Q:497-500) and then built a country seat near the furnace site. Although several sources say Baker Johnson had leased the furnace to Blackford and Thornbury in 1803, the 1808 Varlé map of Frederick and Washington Counties identifies the furnace and a grist or merchant mill as the property of Col. B. Johnson. The structures are defined on Little Hunting Creek at the end of an access road west of the main north-south route. No forge is included on the map.

Blackford and Thornbury (or Thornburg) fireplace liners still exist in homes which once belonged to members of the Johnson family. No other information about the ironmasters at Catoctin has been found, although Thornburg is an important name in the history of the Pennsylvania iron industury (Bining, 1973).

Baker Johnson died in 1811. In his bequest to his son William, his will (RB1:74) mentions an old saw mill and a dam on the easternmost property which became William's. The furnace is described in an 1811 advertisement cited previously in other research. In 1812 Catherine Johnson and other executors of the estate of Baker Johnson sold the lands and furnace to Willoughby and Thomas Mayberry of Philadelphia, despite the fact that Baker Johnson had mentioned in his will that he preferred that property be sold to Blackford. No specific material was found on the Mayberrys at Catoctin but the name of Thomas Mayberry is also associated in the 1835 organization of Cyrus McCormick's Cotopaxi Iron Works (Herbert Keller Papers, McCormick Collection). Mayberry had left Catoctin by 1820.

The official paperwork dealing with military business matters of the War of 1812 is subject to the irregular situation which existed prior to the institution of distinct bureaus at the Federal level. In RG45(NARS) available correspondence of the time dealing basically with letters to officers, includes accounting records and 33 volumes of letters from Navy

agents. These have not been searched. Papers exhausted included Entry 235, Ordnance Proposals and Awards, records dealing with books of the Office of Naval Records and Library and records which refer to commission merchants who bid for ordnance or related miscellaneous items. The work revealed that neither Catoctin itself, nor Blackford, Thornbury, or Willoughby and Thomas Mayberry are mentioned. While a Baltimore fabricator might have used Catoctin as a supplier, it is significant that John McPherson, at a furnace not mentioned, personally contracted to supply the Navy with kentledge (permanent pig-iron ballast for ships).

Secondary sources (Gorr:1972) suggest that the iron from the Catoctin region may have been used after 1800 at the famous Foxall Foundry in the District of Columbia. Added to this is the interesting point that Roger Johnson then owned Columbia Mills, on Rock Creek in the District of Columbia.

BRIEN-McPHERSON PERIOD - 1820-1843

Worthwhile documents which pertain to the social life in the furnace area in the 1820's supply usable data for social aspects of Catoctin in the period from 1820-1840. These include the diaries and correspondence of Moravian missionaries in nearby Graceham.

In 1827, at the suggestion of Mr. Brien, the Moravians tried a short-lived program of preaching in English at a schoolhouse near the Furnace every other Sunday, particularly "for the sake of the negroes who had no other opportunity to hear the gospel". By 1834, the Episcopal persuasion of the ironmasters resulted in the erection of a chapel dedicated to that faith. As a mission chapel within All Saints Parish, association with the church in Frederick remained strong and most ironmasters for the next 30 years served on the vestry of All Saints (Vestry Minutes). Brien himself also owned a home on Courthouse Square in Frederick. Such social connections with Frederick could imply that there was also commercial activity in the County seat which could have involved Catoctin, but no actual records have been found. Secondary sources say the iron was used in Frederick foundries. There is also documentation for the shipping of castings to Baltimore.

Although no ledgers or journals for the Brien era have been recovered, the specific economic aspects concerning the furnace for this period are not neglected. As a matter of fact, the overall economic history of the early National Period somewhat conjectures Catoctin's commercial role as an industrial influence in western Maryland. The development of internal improvements backed by the State and the City of Baltimore, created new distribution patterns as well as a new market for iron works within the railroad industry itself. This new economics in turn, developed an industrial consciousness which encouraged new technology within the iron industry. Competition of new furnaces quickly required old establishments like Catoctin to revamp.

The fact that Catoctin was landlocked and 13 miles from the spur terminal of the Baltimore & Ohio Railroad by 1835 illustrates its negative location factors regarding transportation, but Catoctin did use the railroad, as one consignment paper found in the B&O archives shows. A ton of castings was shipped to H. Thompson & Co., commission merchants in Baltimore, on September 2, 1836. Because the B&O purged its records every 15 years, few such documents as manifests, consignments and bills of lading have survived. The newly organized archives now relies on contributions being sent by the families of former station agents and, hopefully, more information on shipments from Catoctin will be forthcoming. What is apparent in the material found so far is that Catoctin, which had relied on the distant city of Baltimore as early as 1780 continued to use that port city through the nineteenth century, most especially after the introduction of the railroad to Frederick. Improvements at the furnace site in the Brien period have been mentioned by secondary sources. A letter from the Furnace to John McPherson, suggests improvements by mention that a new hearthstone is expected for which 100 dollars will be paid. In addition to castings sent to Baltimore, stoves were made at Catoctin during the Brien period, several examples of which still exist. Because these products have been found in the Frederick area, it could be safely assumed that such products were marketed locally.

While the Brien decades experienced the growth patterns effected by the new nation, the era also knew the negative aspects of the Panic of 1837 and the long depression which followed. Brien-McPherson correspondence in a private collection illustrates labor and marketing problems at Antietam, but we have no proof these were duplicated at Catoctin. Early censuses before 1850 are of no help in the study of particular manufacture, but records of sorts were begun in this era when the iron industry, in an effort to protect itself from competition with imported iron, began to organize itself. The data thus coordinated, however, has already been cited by other researchers.

In 1843, John McPherson, owner of Antietam and trustee for the estate of

his son-in-law John Brien, sold Catoctin Furance, its attached land and Auburn to his grandson, John McPherson Brien (HS19:213). The McPherson influence was to continue indirectly for the rest of the century - with McPhersons continuing to reside at "Auburn".

PEREGRINE FITZHUGH - 1843-1856

In 1843 John McPherson Brien sold the Catoctin Works and Auburn Farm to Peregrine Fitzhugh (HSI9:217), another "ironmaster by heritage". Since Fitzhugh's ownership corresponds with the post-1840 period of development and expansion in the iron industry, more useful printed material is readily available than was the case for the earlier years.

Insurance records of 1849 indicate that Peregrine Fitzhugh held policies on sundry furnace property which he had improved. Additional insurance on the furnace structure in 1853 specifically mentions a bellows house and machinery therein, as if new work on such implements of the industry had been done.

According to the "in" correspondence in the papers of the Lobdell Car Wheel Works, no Catoctin iron was being offered for sale in 1840, but by 1848 Baltimore commission merchants such as Henry Thompson (see Brien chapter) expected in January to receive "soft Pig. . . First in blast". In June of the same year Thompson had received "Catochtin #1 Foundry charcoal, and Sticking & Beatty were offering "Catochtin's strong charcoal iron". On January 3, 1855, #1 and #2 Catoctin Charcoal Foundry iron "used by machinists and others of this City" were offered by Roger and Wetherill.

The social aspects of village life at mid-century are apparent in more available papers which suggest that a Moravian influence continued at least to 1850. Efforts to organize a new Episcopalian parish which would include Catoctin were started in 1851, when All Saints' parishioners such as Peregrine Fitzhugh and M. M. Ege who "resided at too great a distance from Frederick" requested Diocesan action for such change (Diocesan Records). The papers thus imply that Fitzhugh and Ege lived at or near the furnace.

Suggestions as to overall configuration of the site developments during the Fitzhugh period are indicated in the Isaac Bond map of Frederick

County (c.1858) which defines 6,600 acres of furnace lands, as well as the company's railroad track connecting the upper ore bank with the furnace. An important site also defined is the "old forge".

THE KUNKEL DECADES AND THE LAST YEARS

The period of greatest known activity at Catoctin corresponds with the 30-year operation by the Kunkel family, of whom John Baker Kunkel is the most prominent. Deeds and equity court records referring to Kunkel have been used in other recent research, as have the well-known statistical data compiled by the American Iron and Steel Association. A most particular contribution for this period is Payroll Book No. 61, of "JBK& Bro.", May, 1864.

Lesley (1859:50) listed two charcoal furnaces, a hot blast and a cold blast, a point which is also suggested in the Lobdell correspondence previously mentioned. Further description of the place is found in the manuscript census of 1860, manufactures (Schedule 5). Listed are a steam driven foundry, a smithy for making mining tools, a wheelright for wagon repairs, a saw mill, a steam driven flour mill and a post and rail operation. Three horses were used at the foundry, 15 at the flour mill and 80 for charcoaling at the "Furnace". Steam is also listed relative to the "Furnace". Castings and pig iron were the products.

Although the Civil War took place during the Kunkel administration, no record has yet been found for Catoctin's contributing directly to that military effort. Statements have been made that great prosperity attended the furnace at this point (Fraley:1924) but if such were the case, it was most probably because iron was shipped to the well-known foundries and arsenals then existing in the east. The furnace did ship out iron. Hauls of three tons of iron a day for a contractor are recorded in at least one record (McPherson Farm Account Book). General contracted hauls of up to six and a half tons of iron, are listed in the same accounts in 1860 by the owner of "Auburn". (Backloads of furniture, bricks and day stuffs are recorded.) McPherson also hauled limestone in 1860, and had a contract as the company doctor.

Further consideration of the Civil War would also include evidence that Catoctin supplied iron for manufacture. Tradition has long asserted that Catoctin produced plate for the armored vessel, Monitor. Study of old Navy records (RG:14NARS) and a biography of a crew member of the ship (Ellis:c.1924) reveals no such feat. Since Abbott & Son, Baltimore, was among the several fabricators listed as contractors for the project, there is strong suggestion that Catoctin supplied iron to Abbott. Since the books for Abbott & Son are not readily available to prove this, further study in Navy correspondence might possibly include material, but since Catoctin as a secondary would not have been a major issue between the contractor and the supplier, it was felt the time would be better spent on other study. As for the original tradition, there is no other documentation to say that Catoctin had the capacity involved in producing plate for Monitor.

Following Peregrine Fitzhugh as a resident ironmaster-owner, J. B. Kunkel is said to have moved to the ironmaster's house near the furnace in January, 1860 (Richards:1954). He was involved in the technology of iron making, as can be evidenced by his 1876 application for a patent for his process to dephosphorize iron (Ltrs. Pat. 182,371, RG241,NARS). Kunkel's process was one of several such efforts aimed at improving the quality of iron at the time that the industry was turning to Bessemer steel production. Correspondence dealing with Kunkel's work and some of the work of Sydney Gilchrist-Thomas (Ltrs. Pat. 216,910) suggest that Kunkel operated on the basis of a traditional technology at Catoctin; his procedures were limited to a cupola or a puddling furnace such as existed at Catoctin. Thomas's, on the other hand, was designed for the Bessemer converter.

In addition to being close to the processes involved by his plant, Kunkel added to his landed holdings at the furnace and was financially interested in other facets of the industry. Twenty-four tracts in Kunkel's name are listed in several land records (DHH3:614;DHH:215), and according to an entry in the Winans Co. ledger, J. B. Kunkel held some

stock in that Baltimore company.

Workers and their tasks are listed in three extant payrolls of 1882, 1884 and 1886. Recorded are such names as Davis, Kelly, Johnson, Jamison, Sweeney, Penwell; also Hardsock, Humerick, Kilbaugh, Messner, Miller, Devilbiss, Adelsberger, Carbaugh, Finneyfrock and Hinkle. The role of the company store in the exchange of time for goods is apparent, just as it was in most such enterprises.

A general directory for Frederick County (1886:226) lists a population of 400 at Catoctin Furnace post office, including 150 men. (Names of box holders include Emanuel Carbaugh and William Stitely (lab), Isaac Portner (timer), and Charles Sickle (miner)).

Following the death of J. B. Kunkel, the heirs established the Catoctin Iron Co. which went into bankruptcy in 1887. Work then was resumed under the name of the Catoctin Mt. Iron Co. A Dun & Bradstreet listing for Catoctin Mt. Iron Co., March, 1889, says that company "is not prepared to give a statement for publication at present--a close corp^{n} composed of Crs. of the defunct Catoctin Iron Co. who are abundantly able to meet all its contracts. What its Capt is may well depend entirely upon how many liens or prior claims may be established. . .".

For the social scene there are private papers which relate the important of the chapel to the village in the later nineteenth century. Harriet Anderson McPherson died at Auburn in 1896. Although she was buried in Frederick (Mt. Olivet), an obituary written by a close friend of the family says a service was held at Catoctin, with "the grey headed workmen of Catoctin" as the pallbearers.

A ledger for 1899 lists such tasks as sawing shingle wood, opening the upper mine, hauling timbers and grading the railroad. Furnace work is implied in such titles as Engineer, Fitter, Gutterman and Keeper, so the last known document referring to the furnace still reflects the production segment of the industry at the turn of the century.

Summary & Conclusions

Strong material has been found for the social aspects of the site and good evidence for structures has been collected. But, aside from a record of the financial maneuverings of the various owners from 1835-1887, a weakness still exists for firm delineation of the overall commercial activity attending the Furnace's century and a quarter of operation.

Five company records have been recovered; one more is promised but as yet has not come forth. Although what has been studied is precious by virtue of its rarity, the records are so minute a percentage of the more than 1,500 time books, journals and ledgers which could have existed that their usefulness is questioned. Beyond showing what was bought at the company store in a month's time or what men were used for what tasks in a certain month, the facts are not the measureable data needed for an in-depth monograph. Furthermore, there seems to be no future promise that such a degree of material will be found.

It is important to reflect that both Catoctin and Hopewell (Pa.) were once considered for a National Park Service study. Authorities who worked at Catoctin Recreation Demonstration Area in the 1930's say that because records were found to exist for Hopewell - albeit papers limited to the nineteenth century - the Berks County furnace showed more promise for Park Service purposes than did Catoctin. Local respondents insist that Catoctin's records were destroyed when the Furnace office was dismantled and moved to Thurmont in 1927. A few rescued books became the property of the workers who saved them. Whatever the case, the time books, journals and such miscellaneous papers as articles of agreement between ironmaster and laborer - the material needed for a dynamic study - are not available for use at a time when work on an interpretive program at the site is in order. This is not to negate what evidence has been found. It is important to consider a factor that exists in any research project, especially at the

level of assessment that this report represents. As new sources came to light in the course of this project, old sources gained enough new meaning to indicate that further analysis and study may shed more particular information.

It is our recommendation, therefore, that in any future phase a more graphic analysis be made of the site than might have been considered heretofore. Bolstered by the information found by the documentary research and the promise therein, we suggest that research and analysis by an industrial archaeologist, in conjunction with a systematic historical archaeological investigation of areas other than the existing stack be considered. Such a survey could contribute visual material into the text of a formal and final inter-disciplinary report.

Such a concept would involve full investigations, on-site work and analysis. Following the field investigation period, the analysis phase could comprise a record that could go well beyond the customary historical archaeology report. In such a program, a series of historical site plans and isometrics could be developed, illustrating the physical works that once existed, and basic industrial process and service flows that were successively developed at Catoctin during its operating period. Added to this could be a stylized pictorial flow diagram defining the sequence of the metallurgical process for each major site development period resulting from successive technological innovation.

Specific historical factors needing more documentation than promises to be found in written history could be clarified by such excavation as would be the cooperative decision of the expanded research teams, but the contribution of the historical archaeologist who, in addition to immeasurably aiding in the graphic analyses of the technological process through subsurface structural and artifactual excavation and mapping, could also furnish many artifacts which themselves would complement the developmental drawings and add to the visual material produced.

Although success would be contingent upon the clarity of pertinent early deeds and patents, further use of graphic records could be offered by a specific tracing of the geographical growth of Catoctin's landed resources.

The graphic analyses thus produced could be the basis for development of Catoctin Furnace as a meaningful interpretive historic site whether maintained as an excavated ruin such as the Ironbridge Gorge Museum in England which has stabilized the excavated Abraham Darby Ironworks, or incorporating planned architectural reconstruction as at Hopewell or Saugus.

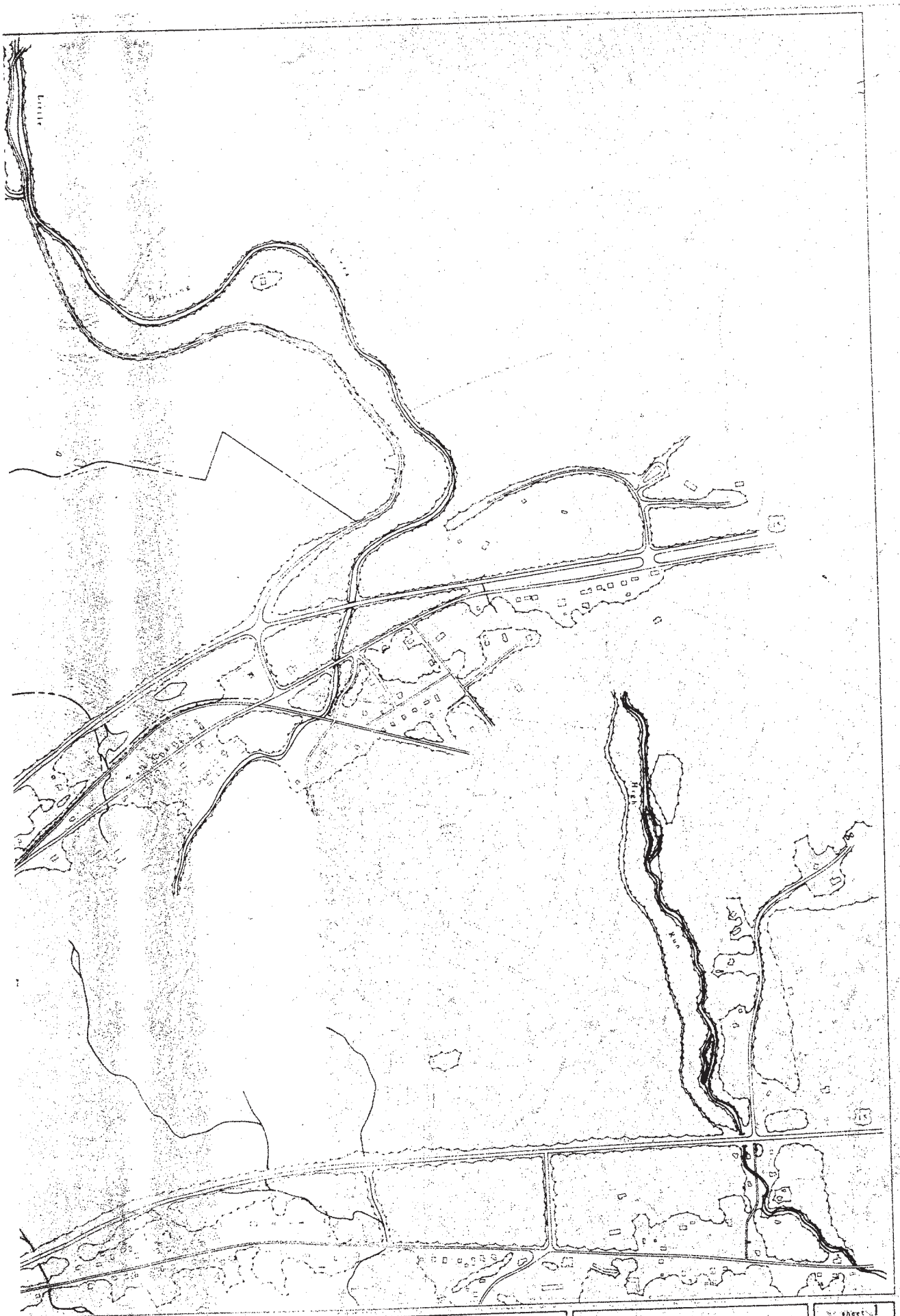
NATIONAL HERITAGE CORPORATION

portion of lands of

CATOCTIN IRON FURNACE

prepared for

Department of Natural Resources, State of Maryland


BASE MAP
DECEMBER 1975

Plates

Plate 1

1786 Catoctin Stove made by "J. J & Co." -- James Johnson & Co. owned Catoctin Furnace from before 1776 to 1793.

Courtesy, Old Salem, Inc., Winston-Salem, North Carolina