NPS Form 10-900 OMB No. 1024-0018 (Rev. 10/90)

United States Department of the Interior National Park Service

National Register of Historic Places Registration Form

RECEIVED 2280 JUN 1 9 2001 NAT. REGISTER OF HISTORIC PLACES NATIONAL PARK SERVICE

1. Name of property:	Beaver Mill	
historic name: N/A		
other names/site number:	N/A	
2. Location:		
street & number : West	Webster Road	

			not for publication	on: N/A
city or town:	Craigsville		vicinity:	X (Beaver)
state: WV	code:WV	county: Nicholas	code: 067	zip code: 26205

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act of 1986, as amended, I hereby certify that this <u>X</u> nomination __request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property X_meets __does not meet the National Register criteria. I recommend that this property be considered significant nationally_statewide X locally. (____See continuation sheet for additional comments.)

Signature of certifying official Date

State or Federal agency and bureau

Date

In my opinion, the property <u>______</u> meets <u>_____</u> does not meet the National Register criteria. (______ See continuation sheet for additional comments.)

Signature of comments or other official

Date

State or Federal agency and bureau

Date

BEAVER MILL Nicholas County, West Virginia

11. Form prepared by:

name/title: Michael Gioulis, Historic Preservation Consultant organization: Same as above date: March, 2001 street & number: 612 Main Street telephone: (304) 765-5716 city or town: Sutton state: WV zip code: 26601

Property owner

name: <u>Lloyd A. Barker</u> street & number: <u>162 Fiesta Way</u> city or town: Ft. Lauderdale

telephone: state: Florida

zip code: 33301

BEAVER MILL Nicholas County, West Virginia

4. National Park Service Certification:

I, hereby, certify that this property is:

- \underline{J} entered in the National Register.
- _____ See continuation sheet
- _____determined eligible for the National
- Register. See continuation sheet determined not eligible for the
- National Register.
- _ removed from the National Register.
- other, (explain:)



Date of Action

san H. Bea

BEAVER MILL Nicholas County, West Virginia

5. Classification:

Ownership of Proper	ty Category of	of Property	No. of Resources within
Property			
X private	\underline{X} building(s)	contributing	noncontributing
public-local	district	<u>1</u>	buildings
public-State	site		sites
public-Federal	structure		structures
	object	-	objects
		<u>1</u>	0 Total

Name of related multiple property listing: NA

No. of contributing resources previously listed in the National Register: 0

6. Functions or Use

Historic Functions: INDUSTRY/PROCESSING/EXTRACTION: Grain mill.

Current Functions: VACANT/NOT IN USE.

7. Description:

Architectural Classification: OTHER: Vernacular

Materials: Foundation: Cut stone and stone pier.

Walls: Clapboard siding and board and batten siding.

Roof: Roll roofing.

Other: N/A.

BEAVER MILL Nicholas County, West Virginia

8. Statement of Significance:

_____A Property is associated with events that have made a significant contribution to the broad patterns of our history.

- B Property is associated with the lives of persons significant in our past.
- X C Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- ____ D Property has yielded, or is likely to yield, information important in prehistory or history.

Criteria Considerations:

N/A A owned by a religious institution or used for religious purposes.

- N/A B removed from its original location.
- N/A C a birthplace or a grave.
- N/A D a cemetery.
- N/A E a reconstructed building, object, or structure.
- N/A F a commemorative property.
- N/A G less than 50 years of age or achieved significance within the past 50 years.

BEAVER MILL Nicholas County, West Virginia

Areas of Significance: Architecture

Period of Significance: 1852-1932.

Significant Dates: <u>1852; 1932.</u>

Cultural Affiliation: N/A

Significant Person: N/A

Architect/Builder: Bright, Kyle B Builder

9. Major Bibliographic References

Previous documentation on file (NPS): additional data:

_ preliminary determination of individual listing Office

(36 CFR 67) has been requested

- _ previously listed in the National Register
- _ previously determined eligible by the National Register
- designated a National Historic Landmark
- _ recorded by Historic American Buildings Survey #
- _ recorded by Historic American Engineering Record #

10. Geographic Data:

Acreage of property: Approximately .15 acres

UTM References: ZONE EASTING NORTHING 17 529159 4242153 Primary location of

__State Historic Preservation

- _ Other State agency
- _____Federal agency
- _Local government
- University
- Other

Specify repository:

Quadrangle: Craigsville, WV

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Beaver Mill
 Nicholas County, WV

The Beaver Mill is located in rural Nicholas County, West Virginia in the vicinity of the town of Craigsville, off of County Route 5. It is adjacent to Beaver Creek, near the junction with Little Beaver Creek. The mill sits in a relatively flat meadow at the bottom of a hill. The rear, or water wheel, side of the building is about forty (40) feet from the creek, separated by the tailrace. Between the tailrace and the creek is a narrow peninsula of small shrub and tree growth. The mill race, or sluice, runs parallel to the creek to the west. It is not clearly defined but its mouth at the mill is identified by a collection of large stones and boulders. There is a small depression identifying its course to the west. Deeds identify the location of the dam and beginning of the mill race as being approximately one-quarter mile above (south of) the mill on property not owned by the current owner. The nominated property does not include the dam. The front of the mill faces north. From the mill location, County Route 5 meanders westward to become Niles Road and eventually connects with State Route 55 near Persinger. In the other direction the small road leading to the southwest from the intersection of the creeks connects with State Route 55/20 within 1.25 miles. There are small trees and woods surrounding the site and there is a small modified house site with a barn and sheds nearby, outside of the boundaries.

The mill is a two-story, clapboard sided, timber frame structure with an end gable roof. It sits on a stone pier foundation. The windows are all six over six double-hung wood sash with two on each floor of each facade. The building is two bays wide and two bays deep and is roughly twenty-five (25) feet wide and thirty feet one inch (30'-1") deep. There is a single window in the center of the gable end on the third floor. On the front, northeast, elevation there is a Dutch door entrance in the west bay. On the rear, the siding is vertical board and batten and there is a plain door on the first floor.

The rear elevation is on a tall raised stone foundation that forms the north wall of the tailrace. It was here that the water wheel was located. The foundation contains large ashlar cut stones. The corner stones are particularly interesting in the rear elevation. They have been hollowed out on the interior to form and L- shaped corner stone, rather than being a full cube.

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The lower eight (8) feet of the board and batten siding, is not original and is in moderate to poor condition, likely due to its proximity to water. The west side elevation has had the lower three (3) feet replaced with pressed metal siding. This was done to provide access to the hurst frame. The north portion of this elevation has also had the lower siding replaced, due to its deterioration near the ground.

There are corner boards on the siding and the roof plates are large timbers that project from the face of the north and south elevation. The center beam also projects through the siding. The roof consists of board sheathing with exposed rafter ends and mineral fiber roll roofing. This is not original. The original roofing cannot be determined in the historic photographs available, though the nearby miller's house contains wood shingle roofing.

The structural system consists of mortise and tenon post and beams. There are diagonal braces mortised into the beams and posts. All posts and beams are 10X10 inches and the braces are 4X6@. The floor joists are 6X8@ and the flooring is six (6) inch tongue and groove. The ceilings are the underside of the flooring above. The floor of the attic is loose laid planks. The interior of the siding is exposed and the studes are similar sized timbers.

There is a stairway leading to the second floor from the center of the first floor. A second stairway leading to the attic runs along the front wall of the second floor. The attic was likely used for storage. The center post is chamfered at the corners and there is a pillowed capital that supports the center beam.

The grinding floor is raised approximately eighteen (18) inches from the first floor of the building. It is eight (8) feet deep from the rear wall of the mill. The entire grinding floor is supported by a separate mortise and tenon timber frame, called the hurst frame. This frame rests on a continuous rear foundation of ashlar stones, and the front, north, portion of the frame rests on a continuous foundation as well. The purpose of separating the grinding floor structure from the remainder of the building is to protect the building structure from vibration induced by the moving grindstones, gears, pulleys, shafts and other machinery. That also explains the continuous foundation.

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	Beaver Mill
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There are two iron belt wheels that drive the two stones, and one large wheel that was the main drive wheel from the water wheel. There are smaller tensioning rollers that are located adjacent to the stone wheels and between them and the large main drive wheel. There is also an iron shifting mechanism for engaging or releasing the belts from the drive wheels. The belts also drove the main vertical shaft. This shaft had wood belt wheels on it at the first floor level to drive various machinery. It continues through to the second floor where it also has wood belt wheels to drive the smutter and bolter and other machinery here. On the first and second floor there are horizontal axle shafts with small diameter belt wheels at the ceiling line that drove other machinery.

The grindstones are housed within wood round boxes. They are French buhr stones with plasters beds and an iron hoop on the perimeter. There is a large wood timber mortise and tenon crane with iron curved lifting bails. These are two arms that connect to opposite side of the stones with pins. They balance the stone and are used to lift the stone when replacement is needed or dressing is required. There is also a wheel adjacent to each stone, called a tentering wheel, which is used to adjust the separation distance of the stones. The lower stone is called the bed stone and is stationary. The upper stone, called the capstone, is connected to the shaft and rotates.

The second floor contains three large pieces of equipment. These are bolters and separators. They are wood boxes with cylinders and other sieves to sift the flour and sort it.

The entire mill is in excellent condition. With the exception of the roof and some siding, all of the fabric appears to be original and intact.

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	Beaver Mill
·	<u>Nicholas County, WV</u>

The Beaver Mill is significant under Criterion C for Architecture for its association as the only remaining mill in Nicholas County. It embodies the distinct characteristics typical of a water-powered gristmill, including its construction technique, plan and surviving equipment. It is also in excellent condition and its integrity remains very high. There have been few changes to the building. The period of significance spans 1852, its year of construction, to 1932, when the post office and general store burned down and the mill ceased operation.

The mill was constructed ca. 1852. It ground corn, wheat and buckwheat. The mill race was reported to be a wooden sluice. The grinding stones were imported from France, the source of many stones of the period. By the mid-19th century, the French buhr had become the industry standard. Prior to that, many mills used local stone. The French stone was quartz, which created sharp edges and self-sharpened as the stones wore. They were typically shipped to the United States in sections, and the stones were then pieced together to form a wheel, which was bound in an iron ring and bedded in plaster. These stones are still extant in the mill. The waterwheels, no longer extant, are reported to have been turbines. This is supported by a historic photograph, which shows no indication of a sluice, which would be needed for an overshot or other vertical wheel. It is also supported by the pulley and shaft arrangement beneath the grinding floor, which indicates the wheels had a vertical shaft instead of a horizontal shaft.

The settlement of Nicholas County, formed in 1818, progressively moved from Greenbrier County to the northwest. Historically known as Beaver Mill, but today called Beaver, the community is located in the lower southeast third of Nicholas County, with the larger town of Craigsville to the east. This placed Beaver on the migration/settlement routes in the county and a prime location as one of the early settlements. The road that runs through Beaver was one of the early county roads, and was the main route southeast from Summersville. It connected to the Weston to Gauley Bridge Turnpike at Summersville, which provided access south to the Kanawha Valley and the salt works. It also provided a route north to Braxton and Lewis Counties, where connection to the railroad could be made and where additional salt works were located. The road traveled west from Beaver using Niles Road to reach Summersville. Traveling to the southeast, it crossed the top of the hill at the current location of Craigsville, and then continued southeast to Richwood. From there, it entered Greenbrier and Pocahontas Counties to the east and south.

The historic town of Beaver Mill was an important little village in Nicholas County's early history. It was the location of the post office and predates the one in nearby Craigsville. This hamlet rivaled Craigsville and was located on the road between

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Summersville and Greenbrier County.

As evidence of its significance as a local rural center of activity, the town contained two blacksmith shops, one at each end of the bridge, a schoolhouse, a large general store, a church and residences. Dick Martin operated the blacksmith shop on the north side of the bridge and on the south side was the shop of Mr. Perry. There was also a second mill farther up the hill towards Craigsville. This was the Walter Sparks mill where he ground corn. In addition to these commercial ventures, there were at least five residences in the bottom or around the creek junction. These included the residences of the Browns, Woods, Sparks, Perrys and the E.H. McCarty residence. McCarty was the owner/operator of the general store and the post office. All of this development was predicated by the presence of water power, which dictated the location of the mill. The mill was an important necessity in 19th century rural Nicholas County life, allowing local farmers to grind their grain.

When the paved road between Summersville and Richwood developed, it was located on the ridge, above the town. This led to the growth of Craigsville as the local center and the demise of the town of Beaver, and likewise the mill. The post office and store burned in 1932 and was not rebuilt. Instead it was supplanted by the post office in Craigsville.

The property was originally part of a large tract of land owned by John McClung. In 1852, part of that tract was transferred to Kyle Bright and Bright acquired another portion later that year from other heirs of McClung. Bright continued to amass property and purchased another 2348 acres in 1866. Bright constructed the mill and sold it in 1872 to William R. Cofer. The deed for this transfer contains reference to the mill dam and water rights to the mill race. Cofer sold the property to George Alderson in 1889. The 1891 *West Virginia State Gazeteer and Business Directory* is quoted in the *Craigsville Keepsake Book* with a list of significant Beaver residents, including: "George Henry Alderson, flour mill; John Cofer, carpenter; and J.K. Cutlip, flour mill." There were one hundred residents in Beaver according to the publication. In 1896, Alderson sold the property to William H. Woods. The property along with the mill remained in the Woods family until 1983.

The Beaver Mill is significant under Criterion C as an excellent example of a mid-to- late 19th century water-powered flour mill. It is very well preserved and there is little loss of integrity or fabric in the building. The type of construction and the details and engineering elements in the building are all associated with the building's function and

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 Beaver Mill
Nicholas County, WV

are a good example of the type of characteristics typical to a mill of the period. Although the original 1852 milling equipment was updated in 1872, and 1895, the present equipment all fits within the period of significance.

A discussion of the extant elements in the building in relation to the milling process of the period illustrates the character of this resource. Grain was delivered to the first level of the building through the front door. The Dutch door arrangement is typical of mills from this time period and is extant in the building. The grain was then transported to the upper level for cleaning and gravity delivery to a hopper at the grinding wheel. This transport was accomplished with elevators which are extant in the Beaver Mill. The elevator is a belt composed of linked small buckets or pails that travel vertically within a wooden chase or flue. Some of these elevators can be seen to the north of the north wheel. Here there is a pair of extant chutes. There are also chutes that acted to gravity feed the hoppers above the center of each wheel.

The grain was ground by feeding into the center of the grindstones, falling between the capstone (top) and bedstone (bottom). The capstone rotated through a pulley system connected to the water wheels and the bedstone was stationary. The stones were separated and a threaded shaft raised the capstone the desired amount, depending on the type of grain and resultant flour. These elements are all extant at the mill. There were two grindstones at the Beaver Mill, also typical for a small rural mill. These would have handled different grain, typically one for corn and another for wheat.

Also extant in the Beaver Mill is the lifting bail and crane that was used to lift the stones for repairs and removal. This is located between the stones and pivoted into place above each stone. It is a large timber arm and brace with iron bails to lift the stones. It was required to be massive in order to support the weight of the stones.

The stones have furrows carved into them radiating outward from the center, so that as the grain is ground it is also pushed to the outside of the stone. Here it falls into the box surrounding the stones and is collected by a funnel at the front. This is one reason that the grinding floor is elevated from the level of the main floor of the mill.

From here it is once again raised with elevators to the second floor, where it is cooled and then transported to the bolters and smutters. The bolters are filters and separators which sort the wheat into different textures and degrees of fineness. Then the flour is bagged and transported.

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The Beaver Mill contains the elevators and chutes that transported the ground grain to the bolters. It also contains two bolting machines and the associated pulley system to drive these machines. The pulleys are wood wheels on wood axles driven from a vertical axle with belt wheels. All of the machinery was driven from the turbine water wheel through a series of leather belts, pulleys and axle shafts. All of these are extant, including the large primary wheel beneath the mill. There are also tensioners and release mechanisms for powering and de-powering various equipment.

One of the separators has the stenciled inscription:

2066 Machine #0 Price \$125.00 Capacity 15 bushels Name: California Deals Improved California Smutter and Separator Combined Manufactured and Sold by M. Deal and Company Patent June 1856-Oct. 1870 36 Mark Lane London E.C.

This was likely to have been purchased ca. 1872 when Cofer was operating the mill.

A typical bolter worked as follows:

- * Meal was fed into a revolving cylinder sloped downwards, often in an enclosed cabinet.
- * Fine meal was sifted through silk material into a chute as the cylinder spun.
- * Remainder of the meal worked its way through various grades of coarser meshes (silk) and other chutes coming out as whole meal flour, middlings or bran.
- * The coarse wheat could be reground, and this became cream of wheat.

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All of the equipment is typical and technologically indicative of the time period, including the smutter, bolter and grindstones, and they are all extant in the mill. The bolter still contains the paddles on the revolving cylinder and the silk filters. There are also spare lengths of leather belt in the attic.

The equipment, especially the elevators, place the mill and its operation in the post-Oliver Evans period. Evans invented the elevator in 1895 and is the author of *The Young Mill-Wright and Miller's Guide* (Larkin). This book and his techniques brought small milling into the industrial age. The Beaver Mill is a good example of that age in rural Nicholas County.

The building itself is also typical for mill construction of the period. It is a mortised and tenoned, timber frame building with wood studding on the exterior of the timber frame. Vertical board and batten siding is extant on the rear, water side, elevation and this may be the original siding. The other three sides have horizontal clapboard siding, which is visible in a historic photograph.

The timbers contain diagonal bracing that is also mortised and tenoned. The center post on the first floor is made more decorative through the use of chamfering of its edges, also making it more functional by providing fewer corners to snag materials and sacks. There is no interior finish to the walls, typical of this type of industrial building.

Also typical and necessary for a mill building is the construction technique of the hurst frame, the timber bay that supports the floor containing the stones. The structure' supporting the stones and the drive mechanism is separate from the main structure of the building. This is necessary to protect and isolate the building from vibrations induced by the turning stones and gears. This type of framework can be seen from beneath the building and is characteristic of mill construction.

The Beaver Mill was not the first mill constructed in the county. Eleven Nicholas and Edward Ryan are reported to have constructed the first mills in the county. Ryan's was dated to 1810. Both were located in the Peters Creek vicinity to the southwest of Summersville. Neither of these mills is extant. In fact, Beaver Mill is the only surviving mill in the county. In historic resource surveys conducted in 1984 and 1985, and subsequent surveys sponsored by the Nicholas County Historic Landmarks Commission,

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no other mills have been identified. For this reason alone the Beaver Mill is highly significant to the county history.

In summary, the Beaver Mill is significant as an excellent surviving example of mill construction in Nicholas County for its intact structural details and machinery.

Beaver Mill Nicholas County, West Virginia

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·	Beaver Mill
	<u> </u>

BIBLIOGRAPHY

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- Callahan, James Morton. <u>Semi-Centennial History of West Virginia</u>. Semi-Centennial Commission of West Virginia. 1913.
- Comstock, Jim. <u>West Virginia Heritage Encyclopedia</u>. Jim Comstock, Richwood, WV, 1976.
- Cox, Manoka W. <u>Craigsville Keepsake Book, a brief history of the Craigsville</u> <u>Community</u>. Craigsville Extension Homemaker=s Club. 1978.
- Larkin, David. <u>Mill The History and Future of Naturally Powered Buildings.</u> Universe Publishing, New York, NY. 2000.
- Workman, Michael. <u>ALow Tech, The Workings of a Water Mill.</u> GoldenSeal, West Virginia Traditional Life. Volume 17, No. 1, Spring 1991.
- Nicholas County West Virginia History 1985. The Nicholas County Historical and Genealogical Society, Inc., Summersville, WV 26651. 1985.
- Yearbook of the United States Department of Agriculture 1914. Washington Government Printing Office, Washington, D.C. 1915.

Nicholas County Courthouse. Deeds, maps, etc.

Interview with Ira Phillips on January 12, 2001 by Mike Gioulis.

Interview with James Hannah on February 2, 2001 by Lawrence Beckerle.

Interview with Betty Russell on March 7, 2001 by Mike Gioulis.

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VERBAL BOUNDARY DESCRIPTION:

The boundary of the Beaver Mill National Register Nomination is shown as the dotted line on the accompanying map titled "Beaver Mill National Register Nomination Nicholas County, WVA" dated March 2001. The map is used as the verbal boundary description.

BOUNDARY JUSTIFICATION:

The boundaries of the Beaver Mill National Register nomination encompasses the mill building itself and the accompanying ground around the mill which includes the tailrace and other acreage which allowed the mill to operate. The boundaries on the north and east are defined by a split rail fence. The boundary to the west is defined by a grouping of trees. The boundary to the south is defined by Beaver Creek.

(NPS Form 10-900)

United States Department of the Interior National Park Service

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Beaver Mill Nicholas County, WV	
Section Number PHOTO	Page 1
Name:	Beaver Mill
Address:	West Webster Road
City:	Craigsville, WV
County:	Nicholas County
Photographer:	Barbara Brimer
Date:	January 12, 2001 A camera malfunction caused a date imprint. The photos were taken in 2001.
Negatives:	West Virginia State Historic Preservation Office, Charleston, WV
Photo 1 of 11:	Front elevation. Camera looking southwest.
Photo 2 of 11:	Front and side elevations. Camera looking south.
Photo 3 of 11:	Rear elevation. Camera looking northeast.
Photo 4 of 11:	First floor interior. Camera looking southwest.

(NPS Form 10-900)

United States Department of the Interior National Park Service

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

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Photo 5 of 11:	First floor interior.	
	Camera looking east.	
Photo 6 of 11:	Smutter and separator detail.	
	Camera looking west.	
•		
Photo 7 of 11:	Detail of separator.	
	Camera looking east.	
Photo 8 of 11:	Detail of shafts and pulleys.	
	Camera looking southwest.	
Photo 9 of 11:	Detail of shaft on second floor.	
	Camera looking southwest.	
Photo 10 of 11:	Detail of pulleys on second floor.	
	Camera looking southwest.	
Photo 11 of 11:	Detail showing under the mill wheels and	
	stones.	
	Camera looking northeast.	
* A camera malfunction caused a date imprint. The photos were taken in 2001.		

* A camera malfunction caused a date imprint. The photos were taken in 2001.



Beaver Mill and Farmhouse Historic Photograph provided by Nicholas County HLC





