

762

United States Department of the Interior
National Park Service



National Register of Historic Places
Registration Form

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in *How to Complete the National Register of Historic Places Registration Form* (National Register Bulletin 16A). Complete each item by marking "x" in the appropriate box or by entering the information requested. If any item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions. Place additional entries and narrative items on continuation sheets (NPS Form 10-900a). Use a typewriter, word processor, or computer, to complete all items.

1. Name of Property

historic name Redwell-Isabella Furnace Historic District
other names/site number VDHR file no. 069-5252

2. Location

street & number Between SR 652 and Hawksbill Creek on north side of Luray N/A not for publication
city or town Luray X vicinity
state Virginia code VA county Page code 139 zip code 22835

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act of 1966, as amended, I hereby certify that this X 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]
Signature of certifying official/Title
6/16/05
Date

Virginia Department of Historic Resources
State or Federal agency and bureau

In my opinion, the property meets does not meet the National Register criteria. (See continuation sheet for additional comments.)

Signature of commenting or other official/Title
Date

State or Federal agency and bureau

4. National Park Service Certification

I hereby certify that this property is:

- 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):

[Signature]
Signature of the Keeper Edson R. Beall
Date of Action 7/27/05

5. Classification

Ownership of Property Category of Property

(Check as many boxes as apply) (Check only one box)
the count.)

private building(s)
 public-local district
 public-State site
 public-Federal structure
 object

Number of Resources within Property

(Do not include previously listed resources in

Contributing	Noncontributing	
2	0	buildings
3	0	sites
1	0	structures
0	0	objects
6	0	Total

Name of related multiple property listing

(Enter "N/A" if property is not part of a multiple property listing.)

N/A

Number of contributing resources previously listed in the National Register

0

6. Function or Use

Historic Functions

(Enter categories from instructions)

Category	Subcategory
INDUSTRY	manufacturing
DOMESTIC	multiple dwelling
FUNERARY	cemetery
LANDSCAPE	natural feature

Current Functions

(Enter categories from instructions)

Category	Subcategory
WORK IN PROGRESS	

7. Description

Architectural Classification

(Enter categories from instructions)

Georgian

Materials

(Enter categories from instructions)

foundation	Stone
walls	Stone
roof	Metal
other	Brick
	Wood

Narrative Description

(Describe the historic and current condition of the property on one or more continuation sheets.)

8. Statement of Significance

Applicable National Register Criteria

(Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing.)

- 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.
- 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 significance distinguishable entity whose components lack individual distinction within the past fifty years.
- D** Property has yielded, or is likely to yield, information important in prehistory or history.

Areas of Significance

(Enter categories from instructions)

INDUSTRY

ARCHITECTURE

Significant Person

(Complete if Criterion B is marked above)

N/A

Criteria Considerations

(Mark "X" in all the boxes that apply.)

Property is:

- A** owned by a religious institution or used for religious purposes.
- B** removed from its original location.
- C** a birthplace or a grave.
- D** a cemetery.
- E** a reconstructed building, object, or structure.
- F** a commemorative property.
- G** less than 50 years of age or achieved

Period of Significance

1787-1880

Significant Dates

1787
1880

Cultural Affiliation

N/A

Architect/Builder

N/A

Narrative Statement of Significance

(Explain the significance of the property on one or more continuation sheets.)

9. Major Bibliographical References

Bibliography

(Cite the books, articles, and other sources used in preparing this form on one or more continuation sheets.)

Previous documentation on file (NPS):

- preliminary determination of individual listing (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 # _____

Primary location of additional data:

- State Historic Preservation Office
 - Other State agency
 - Federal agency
 - Local government
 - University
 - Other
- Name of repository: _____

10. Geographical Data

Acreeage of Property approximately 9 acres

UTM References

(Place additional UTM references on a continuation sheet)

	Zone	Easting	Northing		Zone	Easting	Northing
	1	17	721150 4284200		3	_____	_____
	2	_____	_____		4	_____	_____

___ See continuation sheet.

Verbal Boundary Description

(Describe the boundaries of the property on a continuation sheet.)

Boundary Justification

(Explain why the boundaries were selected on a continuation sheet.)

11. Form Prepared By

name/title	<u>J. Daniel Pezzoni and James R. Graves</u>		
organization	<u>Landmark Preservation Associates</u>	date	<u>March 4, 2005</u>
street & number	<u>6 Houston Street</u>	telephone	<u>(540) 464-5315</u>
city or town	<u>Lexington</u> state <u>VA</u>	zip code	<u>24450</u>

Additional Documentation

Submit the following items with the completed form:

Continuation Sheets

Maps

A **USGS map** (7.5 or 15 minute series) indicating the property's location.

A **Sketch map** for historic districts and properties having large acreage or numerous resources.

Photographs

Representative **black and white photographs** of the property.

Additional items

(Check with the SHPO or FPO for any additional items)

Property Owner

(Complete this item at the request of the SHPO or FPO.)

name	<u>Town of Luray (contact: Jerry Schiro, Town Manager)</u>		
street & number	<u>PO Box 629</u>	telephone	<u>(540) 743-5511</u>
city or town	<u>Luray</u> state <u>VA</u>	zip code	<u>22835</u>

Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C. 470 et seq.).

Estimated Burden Statement: Public reporting burden for this form is estimated to average 18.1 hours per response including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Chief, Administrative Services Division, National Park Service, P.O. Box 37127, Washington, DC 20013-7127; and the Office of Management and Budget, Paperwork Reductions Project (1024-0018), Washington, DC 20503.

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Redwell-Isabella Furnace Historic District
Page County, Virginia

Section number 7 Page 1

NARRATIVE DESCRIPTION

Summary

The Redwell-Isabella Furnace Historic District is located in central Page County, Virginia, just north of Luray. The approximately 9-acre district occupies the west bank of Hawksbill Creek, a tributary of the South Fork of the Shenandoah River, at an elevation of just under 800 feet above sea level. The acreage is steeply to gently sloping with pasture, woodlots, and the oblong pool of Yager Spring, one of the county's boldest springs. Two circa 1800 buildings presently stand on the nominated acreage. These are the buildings identified as the Isabella Furnace Office, a two-story stone building with Georgian interior detail, and the Yager Spring House, a two-story stone dwelling with a large cooking fireplace and a stone and frame addition made in 1965. Both buildings have metal-sheathed gable roofs. The district also includes a cemetery (now devoid of markers), a stone foundation, the furnace bridge mound, and Yager Spring itself, the power source for the furnace and later mills.

Inventory

1. Isabella Furnace Office. Ca. 1800. Contributing building.
2. Yager Spring House. Ca. 1800; 1965. Contributing building.
3. Yager Spring. Ca. 1787. (in industrial use). Contributing site.
4. Foundation. 18th, 19th and/or 20th c. Contributing site.
5. Cemetery. Early 19th c. Contributing site.
6. Furnace bridge mound. Late 18th c. (?) and later. Contributing structure.

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Redwell-Isabella Furnace Historic District
Page County, Virginia

Section number 7 Page 2

Description (continued)

Isabella Furnace Office

The office is a two-level building of rectangular, domestic form and limestone construction. The building is built into a bank so that its east elevation, facing the furnace location, rises a full two stories. The secondary west elevation is one story in height (the upper level). Visible at grade on the two gable ends is a change in the quality of the stonework. The stonework up to about a foot above grade and below appears to be of cruder construction, a condition discussed in the architectural analysis section of Section 8. The stones at the corners of the building are larger for strengthening, and most original prism mortar joints are in good condition. Sections of stonework had become seriously deteriorated by the late 1990s, to the point of endangering the building. These sections were repaired in 2004. The door and window openings lack doors and window sash, but most retain pegged wooden surrounds, and these preserve enough detail to indicate that the windows were double-hung sash. In the north gable is a rectangular opening large enough to have once contained a window but now occupied by a louvered vent. The gable roof with its metal sheathing, exposed rafter ends, and plain rakeboards dates to the late twentieth century. The interior chimney at the south gable end has a short brick cap dating to ca. 1960. A two-tier entry porch formerly rose on the east side. Steps formerly rose to the second tier on the north side, according to an informant.

The upper level interior is also domestic in character, with evidence for a former asymmetrical two-room (hall-parlor-like) plan created by a board partition that crossed the interior on the north side of the opposite west and east entries. The walls retain much of their plaster finish, divided by a molded and beaded chair rail. The floor boards had mostly rotted through by the late 1990s and have since been almost entirely removed, as have what appear to have been narrow baseboards. The space is spanned by beaded joists above which there was presumably originally a board ceiling (the floor boards of the garret above). In the twentieth century some form of inexpensive ceiling material (possibly thick cardboard) was nailed to the undersides of the joists (it has since been removed). The door and window openings are slightly splayed and have single board linings with simple ovolo moldings attached to their inward ends.

The stone chimney breast projects into the room at the south end. Its fireplace has a plastered surround and contains an iron staple for a former pot hook. The mantel is Georgian in character, with a molded architrave below a plain frieze and a crown molding. The mantel bears traces of gray paint (possibly denatured gray-blue paint), as does the chair rail. The west end of the mantel has a sawn-off appearance where it formerly abutted a stair enclosure. The enclosed stair had winders (evident from scars in the plaster), and it ascended to the garret and descended to the lower level. The walls inside the garret stair and at the gable ends of the garret itself have rendering that is cruder than the plaster in the rest of the building. To the right of the fireplace is a recess with scars in the plaster for former shelves. There is also an oddly curved scar between shelves that may have marked the attachment point for

**United States Department of the Interior
National Park Service**

National Register of Historic Places Continuation Sheet

**Redwell-Isabella Furnace Historic District
Page County, Virginia**

Section number 7 Page 3

Description (continued)

some sort of bin mounted on a shelf. The shelves were contained in a cabinet, presumably once with a door that could be locked.

The lower level probably formerly mirrored the upper level in plan, although evidence for a former partition is missing. The smaller north room had a single exterior opening, a vent on the north end formerly fitted with vertical wood bars. This single vent opening suggests the room functioned for food storage. The larger south room functioned as a kitchen. It is accessed through the entry on the west side and illuminated by a single west-side window. At its south end is a cooking fireplace spanned by a thick wood lintel with a beaded lower edge and a canted inner surface. The lintel was whitewashed, and stuck into it is an unusual flared nail that may once have served as a hook for a betty lamp. The space is spanned by vertical-sawn joists, one with two holes bored through it (perhaps to secure some now missing feature), and a pair that are slightly wider than the others (perhaps related to a second stair, although there is no other evidence for this). In the corner to the right of the fireplace is a small section of early floorboards for the room above, whitewashed and later painted gray (or perhaps soot-stained) on their undersides. The walls have remnant plaster, as do the undersides of the inner door and window lintels where the plaster was adhered to laths that appear to be wrought-nailed to the lintels. The door jamb retains pintles for former strap hinges, and the south jamb is fastened to the stonework by a large iron spike. The masonry on the north side of the door was reinforced with poured concrete at some point.

Yager Spring House

The Yager Spring House consists of an original west end and an 1865 east end addition. Like the Isabella Furnace Office, the house is built into a bank so that its south front elevation, facing Yager Spring, rises a full two stories. The rear north side is one story in height. The original stone section (which has prism mortar joints) and the addition with its stone first story and board-and-batten second story are painted white (except for the first-story east end). Across the front of the house extends a two-tier porch on log posts, with weatherboarded shed roof ends, exposed ceilings, a concrete floor on the lower tier, and a board railing and plywood storage cabinet on the upper tier. The metal roofing differs over the two sections, and stone chimney caps (painted silver) rise from the two gable ends. The west chimney cap serves an interior chimney whereas the south chimney cap is false.

The original section door and window openings have pegged surrounds with ovolo moldings. The windows have batten shutters, some secured by iron cross bars. The first-story east end window (in the addition) is reused, presumably from the east end of the original section. The early doors are batten construction. The first-story front elevation of the addition has sliding double six-light sash, whereas other windows are 6/6. At the base of the southeast corner of the addition, under the porch, is a patch of mortar inscribed "BLT 1965 BY/JOE PRINTZ/BUDDY P[PRINTZ?]." The lower level has two rooms, one each in the original section and addition, and each with concrete floors and white painted

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Redwell-Isabella Furnace Historic District
Page County, Virginia

Section number 7 Page 4

Description (continued)

walls. The original room is dominated by a large cooking fireplace with a thick iron lintel. A long and gracefully curved pot hook spans the fireplace. In a back corner is a small iron warming shelf. The raised stone hearth presumably dates to 1965. On the side of the chimney breast is a cast iron stove manufactured by A. T. Nye & Son of Marietta, Ohio. The room is spanned by vertical-sawn joists on iron hangers (suggesting alteration circa 1965). The window and door openings are slightly splayed. The windows have concrete sills, and the door is hung on strap hinges attached with hand-headed nails. The room in the addition, the present kitchen, has conventional base cabinets, dimensional lumber ceiling joists, and a stair with a plain tongue-and-groove enclosure underneath (containing a closet) and a simple newel and railing.

The original second floor is divided asymmetrically into two rooms (essentially a hall-parlor plan) by a vertical beaded board partition. The partition is painted white over traces of whitewash, and it has a beaded batten door. The wide floor boards have, on their undersides visible in the room below, regular straight saw marks that suggest they were sash sawn. At the west end is the irregular stepped mass of the chimney. The ceiling has been removed revealing a common rafter roof. The rafters, which may be hewn, are joined at the ridge with mortise-and-tenon joints fastened with long pegs. The west room has beaded baseboards (painted green under white) and the east room has thick plain baseboards. In the addition is a bedroom, a hallway, and a bathroom.

Other Resources

In front of the Yager Spring House is the Yager Spring, which issues from the center of an amphitheater-like recess in the hillside on the west side of Hawksbill Creek. A concrete wall extends across the east end of the recess, damming the spring and creating an oblong pool. Watercress grows in the pool, and its north side is lined with sycamores. The spring has a flow of eight million gallons per day, and it has a subterranean connection to Luray Caverns, located approximately a mile and a half to the southwest.

Off the east end of the Yager Spring House and on a bank above the spring pool is an L-shaped stone foundation. The foundation may be a remnant of a gristmill that stood in the general vicinity, although the foundation appears to have been altered by the addition of stonework in the late twentieth century to serve as a landscape feature (presumably circa 1965 when the adjacent house was remodeled). Next to the foundation is a circular stone planter. Off the west end of the Yager Spring House are stone retaining walls that may be entirely late twentieth century in date, or that may incorporate earlier walls or foundations.

Off the south end of the Isabella Furnace Office, in the angle of Yagers Road (Route 652) and the lane that passes in front of the office, is a small cemetery associated with the furnace. Interments were formerly indicated by iron gravemarkers. In front of the office, across a field and near the west bank of

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Redwell-Isabella Furnace Historic District
Page County, Virginia

Section number 7 Page 5

Description (continued)

Hawksbill Creek, is the furnace bridge mound. The mound has a relatively abrupt east terminus where the bridge formerly spanned to the furnace. (The furnace is gone.) At the mouths of several groundhog burrows are piles of dark gray material, possibly charcoal and/or furnace cinders.

Integrity Statement

The surviving above-ground resources of the Redwell-Isabella Furnace Historic District possess good overall integrity. Both buildings, the Isabella Furnace Office and the Yager Spring House, preserve character-defining exterior and interior features. The office, in particular, is relatively well preserved despite decades of neglect, with its original mantel, chair rails, and door and window trim intact. The office had been in danger of collapse in recent years but in 2004 deteriorated sections of its stone walls were stabilized. The Yager Spring and the furnace bridge mound retain their historic character. The nominated area is probably more overgrown than it would have been historically, but it is not disturbed by modern development and its rural surroundings are occupied by mostly historic resources including two stone houses associated with the furnace.

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Redwell-Isabella Furnace Historic District
Page County, Virginia

Section number 8 Page 6

NARRATIVE STATEMENT OF SIGNIFICANCE

Summary

The Redwell-Isabella Furnace Historic District, located in Page County, Virginia, comprises remnants of Page County's oldest iron furnace complex. Redwell Furnace was apparently established by Derrick Pennybacker in 1787. Later known as Isabella Furnace, the furnace operated until the 1840s, and a forge, flour mill, and woolen factory operated at the location into the late nineteenth century. Resources include the Isabella Furnace Office and the Yager Spring House, both dating to the early nineteenth century or earlier, the furnace bridge mound, and boldly flowing Yager Spring, a stone foundation, and a cemetery. The property has been acquired by the Town of Luray, which is exploring rehabilitation options. Since no archaeological survey work has been done the district is not designated at this time as significant under Criterion D. However the district does possess the potential to yield archaeological resources with further research and site examination as the Town of Luray develops the area.

Applicable Criteria

The Redwell-Isabella Furnace Historic District is eligible under Criterion A with significance in the area of industry for its association with the development of the iron, milling, and woolen textile industries in Page County. The district is also eligible under Criterion C with significance in the area of architecture for its two extant buildings—the putative furnace office and worker dormitory—examples of furnace-related building types that are now rare in Virginia. The period of significance extends from the presumed 1787 date of establishment for Redwell Furnace until 1880, the date the woolen mill at the location burned, marking the end of intensive industrial activity at the location. The Redwell-Isabella Furnace Historic District is eligible at the local level of significance.

Acknowledgments

A number of organizations and individuals assisted in the preparation of this report. Foremost among these was the owner of the property, the Town of Luray, represented by Town Manager Jerry Schiro and Parks and Recreation Director Pat O'Brien. Others who provided assistance included Joseph Davis of Luray, H. E. Comstock of Winchester, Christina L. Painter of Luray, and David Edwards, Joanna Evans, and Marc Wagner of the Virginia Department of Historic Resources.

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Redwell-Isabella Furnace Historic District
Page County, Virginia

Section number 8 Page 7

Historic Context

Redwell Furnace was apparently established in 1787 by Derrick Pennybacker (1737-1802). Pennybacker, whose first name is also recorded as Dirk, was a native of Berks County, Pennsylvania. In 1781 he was recorded as a "waggon master" (wagonmaker?), although he was also involved in the iron industry from an early age. He apprenticed at Hopewell Furnace in Elverson, Pennsylvania, and he also owned an interest in Hugh's Furnace near Sharpsburg, Maryland. In the mid-1780s Pennybacker moved to present-day Shenandoah County, Virginia, and established a slitting mill and forge at Pine Forge on Smith's Creek. He is believed to have purchased the Redwell site from Emanuel Ruffner in 1785. That his furnace was in blast two years later is suggested by a stove plate inscribed "D. Pennebacker His Redwill Furnace, Septe 21, 1787."¹

In his study of Redwell Furnace and its wares, historian H. E. Comstock has reconstructed the general layout of the ironworks by drawing upon furnace account books and Augusta County chancery records. Most of Comstock's sources date to the mid- and late 1790s with a few from the first half decade of the nineteenth century. Comstock is guided by the assumption that the Redwell Furnace complex would have been similar to ones in Pennsylvania where Pennybacker and his associates had learned their trade. The Redwell furnace was likely a stone structure of truncated pyramidal form, probably under thirty-five feet in height, with two arches opening to the casting floor and to a set of water-powered bellows. The furnace was built next to a bank to facilitate access to the top where the furnace was "charged," that is, loaded with iron ore, charcoal, and limestone. At Redwell a bridge of approximately forty-five to fifty feet in length spanned to the top of the furnace from the uphill west side, twenty feet of it under roof to protect the carters. The roofed section was known as the "Bridge House," and it was rebuilt at least once, after a fire in 1804, and presumably other times. The mound that supported the west end of the bridge (either the 1790s bridge or a later one) is today the most evident remnant of the furnace.²

Other furnace buildings and structures enumerated by Comstock include:

- Two earthen-floored log casting houses, one or both of which enclosed the base of the furnace. One casting house was known as the "pot house" and was apparently "intended for use as a flaskcasting area where holloware such as kettles and skillets were run." It had a gable roof and apparently clapboarded sides. The other presumably served for casting iron pigs.
- A large ore and charcoal house located behind the bridge mound and constructed of log, planking, and clapboards.
- A dam of log crib construction filled with furnace cinders for damming Yager Spring. The impounded area measured about one and a half acres in extent. The dam was replaced at least once, after a flood in the spring of 1804.

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Redwell-Isabella Furnace Historic District
Page County, Virginia

Section number 8 Page 8

- An excavated mill race connecting the impounded spring to the furnace, a distance of about 500 feet. Comstock and other observers note that the race is still evident, although whether it was enlarged or altered in later decades is unknown.
- A gristmill of stone construction, or of unknown construction with a stone foundation. Comstock hints that the stone foundation near the Yager Spring House may be the remnant of this mill.
- A grain storage house near the gristmill.
- A sawmill which like the gristmill was located along the race between the spring and furnace.
- A store (possibly the building known as the Isabella Furnace Office).
- A "kitchen/dining hall for the workers."
- A smokehouse.
- A dairy.
- A smith shop of either stone or log construction.
- Two stables, one of stone and one of log, the latter "substantially floored and covered with 1/2 inch planks, doors hung on large iron hinges."
- Three stone houses occupied by Derrick Pennybacker, his son Benjamin (until 1796), and Jacob Rivercomb (association with the ironworks unknown). Comstock notes that the three houses were still standing at the time of his writing in 1981. Two stone houses that could date to the 1790s stand on parcels adjoining the historic district.
- Six worker houses.³

According to county historian Harry Strickler, the furnace was purchased by Benjamin Blackford, John Arthur, Joseph Arthur, and John Graham on April 13, 1813. Other sources suggest the furnace was acquired by Blackford as early as 1795 (probably incorrect) or in 1808 or 1809. It is possible that Blackford had an interest in the furnace before actually purchasing it. Blackford & Arthur, as the new ownership styled itself, renamed the complex Isabella Furnace and operated it in conjunction with the nearby Speedwell Forge. The most complete statistical account of the Redwell-Isabella Furnace dates to the Blackford & Arthur period and appears in the 1820 federal census of manufactures. The furnace was capitalized at \$90,000 and it annually consumed 2,700 tons of ore, 140 tons of limestone, and

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Redwell-Isabella Furnace Historic District
Page County, Virginia

Section number 8 Page 9

216,000 bushels of charcoal at a cost of \$12,600. Ninety-two men, forty-five women, and twenty-five boys and girls were employed at a cost of \$11,000 in wages. The projected production for 1820 was 300 tons of castings and 250 tons of pig iron. Revenue from the sale of castings and pigs was projected to be about \$31,500 (Isabella's sales were described as "very dull" in 1820). The census-taker noted that the "Furnace is capable of Making 400 tons of Casting & 350 Tons of Pig Metal if the demand for articles would justify extending the business." Isabella Furnace "is not inferior to any in the United States" the census-taker concluded.⁴

By January 1840 the Blackford firm (then known as Benjamin Blackford & Son) had amassed debts of over \$60,000, and to settle with creditors it sold Isabella Furnace and another that it had erected, Catherine Furnace, to Nicholas W. Yager and Abraham Kendrick. According to Harry Strickler, Yager had moved to Page County from Madison County in 1810 to work as Blackford's secretary (perhaps he worked from the extant office). The deed of sale provides a wealth of information on Isabella Furnace at what would turn out to be the final years of its operation. The Isabella site included the Isabella Furnace and Speedwell Forge, and personal property including thirty-three slaves, seventy horses, twenty-six mules, twenty wagons, forty plows, forty harrows, cattle, hogs, and stores of corn, wheat, and rye. African American slaves, both owned and hired, were important to the operation of the county's iron furnaces during the antebellum period, according to historian Charles C. Ballard. Also mentioned in the deed were "all the pot ware including moleboards and mashinery [*sic*]" and "25 stoves in use and all the new stoves on hand, and all the pig Iron, say 300 ton, 80 tons of castings, 10 ton Bar Iron." The deed described only one furnace-related building when it transferred "all the goods, wares and merchandize in the store House and Seller at Isabella Furnace, consisting in part of cloths, casimers, c[al]licoes, cambrics, some Hardware, shoes &c, amounting in all to about \$500.00." This store was probably housed in the Isabella Furnace Office.⁵

The 1840 deed notes the presence of 800 loads of coal (charcoal) and 4,000 cords of wood, which would suggest the furnace was in operation in early 1840. A nineteenth-century account cited by Kathleen Bruce states that the furnace was abandoned in 1841. A number of factors may have been responsible for the furnace going out of blast. Page County historian Gary Bauserman has suggested that a salamander—a mass of solid iron—may have formed in the furnace crucible, an obstacle that would have been prohibitively expensive to remedy. It may be that the location of the furnace in the middle of the increasingly settled and cleared Luray Valley placed it farther from the forests that were the source of the charcoal needed to fire it. Later area furnaces such as Catherine Furnace, established in 1836, were built at forested mountain locations. Also, the Panic of 1837 and ensuing depression may have made operation of the furnace financially unattractive.⁶

The furnace property entered a new era in the second half of the nineteenth century. According to Vivian Black:

In 1860 [N. W. Yager] built for his son W. O. Yager, a large four story woolen mill, on the foundation of the furnace. The mill was run by water power from the spring . . . This mill produced blankets, bolts of all types of material. The first story was used for storage and

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Redwell-Isabella Furnace Historic District
Page County, Virginia

Section number 8 Page 10

immense dye vats; on the second floor were six large looms, on the third floor were the spinning wheels, some of which had enormous spindles.

For her account Black relied on the recollections of W. O. Yager's daughter, Mrs. Henry McKay, but she may be incorrect on the date of construction. After graduating from the Virginia Military Institute in 1852, William Overall Yager (1833-1904) lived in Kansas and Texas, and according to a separate account by McKay, he did not return to Page County until 1867. The earliest recorded deed to reference the woolen mill was made in June 1868 when N. W. Yager and his wife Christina transferred the "Page Woolen Mill" to the Page Woolen & Cotton Manufacturing Co. for \$5,000.⁷

Another, indirect indication that the Page Woolen Mill was built after the war comes from the fact that it is apparently not mentioned in connection with wartime events that occurred at or near the furnace site. On September 22, 1864, a Federal cavalry force was dispatched down the Luray Valley to head off Confederate General Jubal Early's army in Shenandoah County. The Federal cavalry was engaged by the Confederates at Yager's Mill, and although the Federal force prevailed, it was stalled long enough to allow Early's army to escape. The description of the location as Yager's Mill probably refers to N. W. Yager's gristmill, which was enumerated in the 1850 federal census, rather than the woolen mill. In 1850 the water-powered Yager Mill produced 1,000 bushels of flour valued at \$4,000 as well as \$820 worth of "other articles." Civil War-era maps appear to show a gristmill at the location, one of an impressive concentration of mills along Hawksbill Creek and its tributaries.⁸

A few weeks after the engagement at Yager's Mill, in early October 1864, a Federal force commenced the destruction of mills and barns in Page County as part of Union General Philip Sheridan's strategy to deprive Lee's army of supplies, an action known locally as the Burning. Historian John Heatwole's account of the Burning fails to mention what if any events occurred at the furnace/mill site, although he does note the destruction of important Luray-area industrial centers such as the Borst Tannery and Willow Grove Mill, and woolen mills were burned elsewhere in the Shenandoah Valley. W. O. Yager served as a colonel in the Confederate army, and had there been a woolen mill operated by him at Yager's Mill, it would surely have been a target of the Burning.⁹

The "Page Woolen Manufacturing Co." is profiled in the 1870 federal census industrial schedules for Page County. The mill converted raw cotton and wool into \$5,570 worth of satinets (imitation satin), linseys, blankets, and yarn. It also produced \$500 worth of "jobbing," probably piece work. On average, six males over sixteen years of age, three females over fifteen, and one child worked in the mill for six months out of the year, supervised by a head weaver named Wisewicks. A single water wheel powered two "B." looms, two "N." looms, 240 spindles, and one carding machine with a daily capacity of 100 pounds of carded wool. The 1868 deed adds other details. Carding took place in a "carding house," a separate building or perhaps a wing of the main mill. The deed transferred water rights sufficient to run ten looms, suggesting plans to expand beyond the four looms enumerated in 1870.¹⁰

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Redwell-Isabella Furnace Historic District
Page County, Virginia

Section number 8 Page 11

Capitalized at \$18,000 in 1870, the Page Woolen Manufacturing Co. was probably one of Luray's largest employers in its day, although it would have been dwarfed by the Deford Tannery and other enterprises begun in the 1880s after the railroad reached town. The woolen mill did not survive that long, however. In 1880—apparently before the federal census of that year was taken—the mill burned. According to Black, "Someone let a box of matches fall on the wool as it was going through the pickers." The 1885 Lakes atlas records the aftermath—the woolen mill on its short mill race is identified as a "mill site." The 1885 map also shows W. O. Yager as the owner of three buildings at the site, including one that may be the Isabella Furnace Office. Across Hawksbill Creek is shown a schoolhouse, probably erected on a lot donated by Yager in 1884. Black notes that Yager preached to his employees in a chapel that he had had erected, and that he cared for them "both in body and spiritually." Black also states that many frame buildings were erected as part of the woolen mill enterprise (none was still standing in 1938) and that a gristmill was operated in connection with the woolen mill. This mill, which may have been the antebellum Yager's Mill or a successor, stood beside a race between the spring and the furnace/woolen mill site.¹¹

In the late 1860s and early 1870s, a merchant named Wesley Bear (1808-79) operated a store at the furnace/mill site. The 1868 deed refers to "W Bear's Store house," and N. W. Yager's estate accounts make references to Bear in 1869 and 1870. Bear's store is not labeled on the 1885 Lake map; presumably the store was not continued after Bear's death in 1879. It may be that Bear's store was located in the Isabella Furnace Office, the possible location of the store mentioned in the 1840 deed. There is little evidence for industrial or commercial activities at the furnace/mill site from the 1880s on. W. O. Yager paid \$600 for the property when he bought out other owners of the mill in 1882, and that same year buildings on the ten-acre Page Woolen Manufacturing Co. tract were valued at \$300 in county land tax records. W. O. Yager had begun a career in public service in the 1870s, serving two terms in the Virginia House of Delegates in 1874-75 and 1879-80, and about 1880 he served as division superintendent of county schools. From 1884 to 1896 he was Page County treasurer.¹²

Industrial activity appears to have mostly ended at the location by the early twentieth century. A building near the location of the Yager Spring House, possibly the mill, is shown in ruinous condition in a circa 1955 photograph published in the local paper. In 1965 the daughters of Mrs. Henry McKay (W. O. Yager's daughter) hired local builder Joseph Printz to enlarge the Yager Spring House to serve as a summer residence. (Another individual named Buddy, who may also have been a Printz, also worked on the addition.) In recent years the property was acquired by the Town of Luray, and the Isabella Furnace Office is presently undergoing stabilization with funding from Luray Caverns.¹³

Architectural Analysis

Information compiled by H. E. Comstock and others (reviewed above) provides a sense of the architectural character of the Redwell Furnace complex at the close of the eighteenth century. The complex buildings were built of stone, log, and apparently frame, some with gable roofs. In this regard the buildings were not atypical of eighteenth-century construction in Page County.¹⁴

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Redwell-Isabella Furnace Historic District
Page County, Virginia

Section number 8 Page 12

The original functions of the two surviving buildings, the Isabella Furnace Office and the Yager Spring House, are subject to conjecture. According to H. E. Comstock, local tradition going back many years identifies the office as such, and its location near what was presumably the entrance to the furnace complex on the main road supports an office function. The shelves next to the fireplace, apparently once secure inside a cabinet, may have been used for keeping records, money, or other valuables. The building may have doubled as a store or commissary, an enterprise that would also have required record-keeping and would have been advantageously located on a road. Eighteenth-century records mention a store, although whether this is the same building is unknown. The 1840 description of a store with a cellar may refer to this building. The presence of the cooking fireplace in the lower level suggests the building may also have served a domestic function, at least in part. It was not unusual for store clerks or other clerical workers to lodge at their place of employment during the period.¹⁵

The fact that records for the Pennybacker period are not known to mention an office may be an indication that the building dates to the later Blackford period. If so, its Georgian styling would suggest a date of construction early in the period, probably before around 1820. The change in the quality of the stonework near grade on the gable ends may indicate that the lower stonework is earlier, perhaps a foundation for a previous non-masonry building on the site. Or the lower stonework may have been built with the present building and is less refined because it is a foundation that has been partially exposed by a change in grade. One notable albeit unhelpful aspect of the building is an apparently total absence of graffiti that may shed light on its historic use.¹⁶

H. E. Comstock believes the Yager Spring House may have served as a dormitory for furnace workers. Its large lower-level cooking fireplace and its upper-level hall-parlor plan are indicative of a domestic function. Other possibilities are a kitchen and dining hall for workers (not an interpretation shared by Comstock) or a miller's house, since it stood near the former gristmill. The house's location so close to the spring would have made it suitable for cooking, washing, and other activities requiring clean water.¹⁷

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Redwell-Isabella Furnace Historic District
Page County, Virginia

Section number 8 Page 13

Endnotes

1. Strickler, *Short History of Page County*, 98-99, 115; Graves, "Redwell / Isabella Furnace National Historic District;" Comstock, "Redwell Ironworks." According to H. E. Comstock, commenting on the 1787 stove, "the date displayed on the stove could have represented either the date when the works was put into blast, or the first date a stove of that pattern was run" (p. 34). A Redwell Furnace account book at the Virginia Historical Society begins with a 1791 date.
2. Comstock, "Redwell Ironworks," 35, 38.
3. *Ibid.*, 36, 38, 86.
4. Comstock, "Redwell Ironworks," 47; Strickler, *History of Page County*, 98; Page County Deed Book D, p. 88. The 1795 Blackford purchase date is given by Vivian Black in her 1938 report (Black, "Isabella Furnace and Settlement"). The 1808 date is suggested by research conducted by Rod Graves. Strickler gives the alternate date of 1809 for the Blackford purchase on page 365 of his history.
5. Page County Deed Book D, p. 88; Strickler, *History of Page County*, 326; Ballard, "Dismissing the Peculiar Institution."
6. Gary Bauserman personal communication; Page County Deed Book D, p. 88; Bruce, *Virginia Iron Manufacture in the Slave Era*, 133.
7. Black, "Isabella Furnace and Settlement," 4; Strickler, *Short History of Page County*, 76, 190; Page County Deed Book N, p. 231.
8. Virginia Civil War Trails website; *Official Atlas of the Civil War*, Plate 100 Map 1 and Plate 137 Map Sheet II (B).
9. Heatwole, *The Burning*, 115, 120-122, 219.
10. U.S. census; Black, "Isabella Furnace and Settlement," 4; Page County Deed Book N, p. 231.
11. Black, "Isabella Furnace and Settlement," 4; U.S. census; Lake's atlas; Page County Deed Book 3, p. 189.
12. Page County Deed Book N, p. 231; Will Book M, pp. 142, 344; Strickler, *Short History of Page County*, 378, 379, 382.
13. H. E. Comstock personal communication; *Page News & Courier*, February 23, 1989.

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Redwell-Isabella Furnace Historic District
Page County, Virginia

Section number 8 Page 14

14. Giles and Pezzoni, "Page County Historic Resources Survey Report," 12-13.
15. H. E. Comstock personal communication.
16. Ibid.
17. Ibid.

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Redwell-Isabella Furnace Historic District
Page County, Virginia

Section number 9 Page 15

BIBLIOGRAPHY

- "Appraisal Report of Yager Spring Property." Richmond, Virginia: Michael G. Miller Associates, 1997.
- Ballard, Charles C. "Dismissing the Peculiar Institution: Assessing Slavery in Page and Rockingham Counties, Virginia." Harrisonburg, Virginia: Garrison Press, 1998.
- Black, Vivian. "Isabella Furnace and Settlement." Works Progress Administration of Virginia Historical Inventory, 1938.
- Borden, Duane L. *Tombstone Inscriptions, Page County Virginia*. Denver, Colorado: 1986.
- Bruce, Kathleen. *Virginia Iron Manufacture in the Slave Era*. New York, N.Y.: The Century Company, 1931.
- Comstock, H. E. "The Redwell Ironworks." *Genealogical Society of Page County, Virginia, Newsletter*. 7:2 (Spring 1996): 33-42; 7:3 (Summer 1996): 47-54; 7:4 (Fall 1996): 80-88 (reprint of article that originally appeared in *The Journal of Early Southern Decorative Arts* 7:1 [May 1981]: 40-81).
- Craddock, Ann. "Old Stone Building (Isabella Furnace Office)." Virginia Historic Landmarks Commission Survey Form, 1973.
- _____. "Yager Spring." Virginia Historic Landmarks Commission Survey Form, 1973.
- Giles, Leslie A., and J. Daniel Pezzoni. "Page County Historic Resources Survey Report." Lexington, Virginia: 1998.
- Graves, James R. "Redwell / Isabella Furnace National Historic District." Report, 2004.
- Hammond's Edition of the Atlas of Shenandoah & Page Counties Virginia by D. J. Lake & Co. 1885*. (Lake's atlas.) Strasburg, Virginia: GP Hammond Publishing, 1991.
- Heatwole, John L. *The Burning: Sheridan in the Shenandoah Valley*. Charlottesville, Va.: Howell Press, 1998.
- Loth, Calder, ed. *The Virginia Landmarks Register* (fourth edition). Charlottesville, Virginia: The University Press of Virginia, 1999.

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Redwell-Isabella Furnace Historic District
Page County, Virginia

Section number 9 Page 16

Bibliography (continued)

Morris, Cannie C. "Catherine Furnace." Works Progress Administration of Virginia
Historical Inventory Report, 1936.

Official Atlas of the Civil War. New York, N.Y.: Thomas Yoseloff, 1958.

Page County chancery, deed, land tax, and will records. Page County Courthouse,
Luray, Virginia.

Page News & Courier. Luray, Virginia.

Pezzoni, J. Daniel. "Redwell-Isabella Furnace Historic District." Virginia Department of
Historic Resources Preliminary Information Form, 2003.

Strickler, Harry M. *A Short History of Page County, Virginia.* Berryville, Virginia: Virginia Book
Company, 1952.

United States Census. Page County, Virginia, industrial schedules for 1850, 1860, 1870 and 1880
and population schedules for 1880. Microfilm, Preston Library, Virginia Military
Institute, Lexington, Virginia.

Virginia Civil War Trails website (www.civilwar-va.com).

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Redwell-Isabella Furnace Historic District
Page County, Virginia

Section number 10 Page 17

Verbal Boundary Description

The nominated area is portrayed on the 1:200-scale map that accompanies the nomination.

Boundary Justification

The boundaries of the nominated area include those furnace-related historic resources owned by the sponsor, the Town of Luray.

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Redwell-Isabella Furnace Historic District
Page County, Virginia

Section number Photos Page 18

All photographs are of:
Redwell-Isabella Furnace Historic District
VDHR File Number: 069-5252
J. Daniel Pezzoni, photographer
Negative Number: 20327

All negatives are stored with the Virginia Department of Historic Resources, Richmond, Virginia:

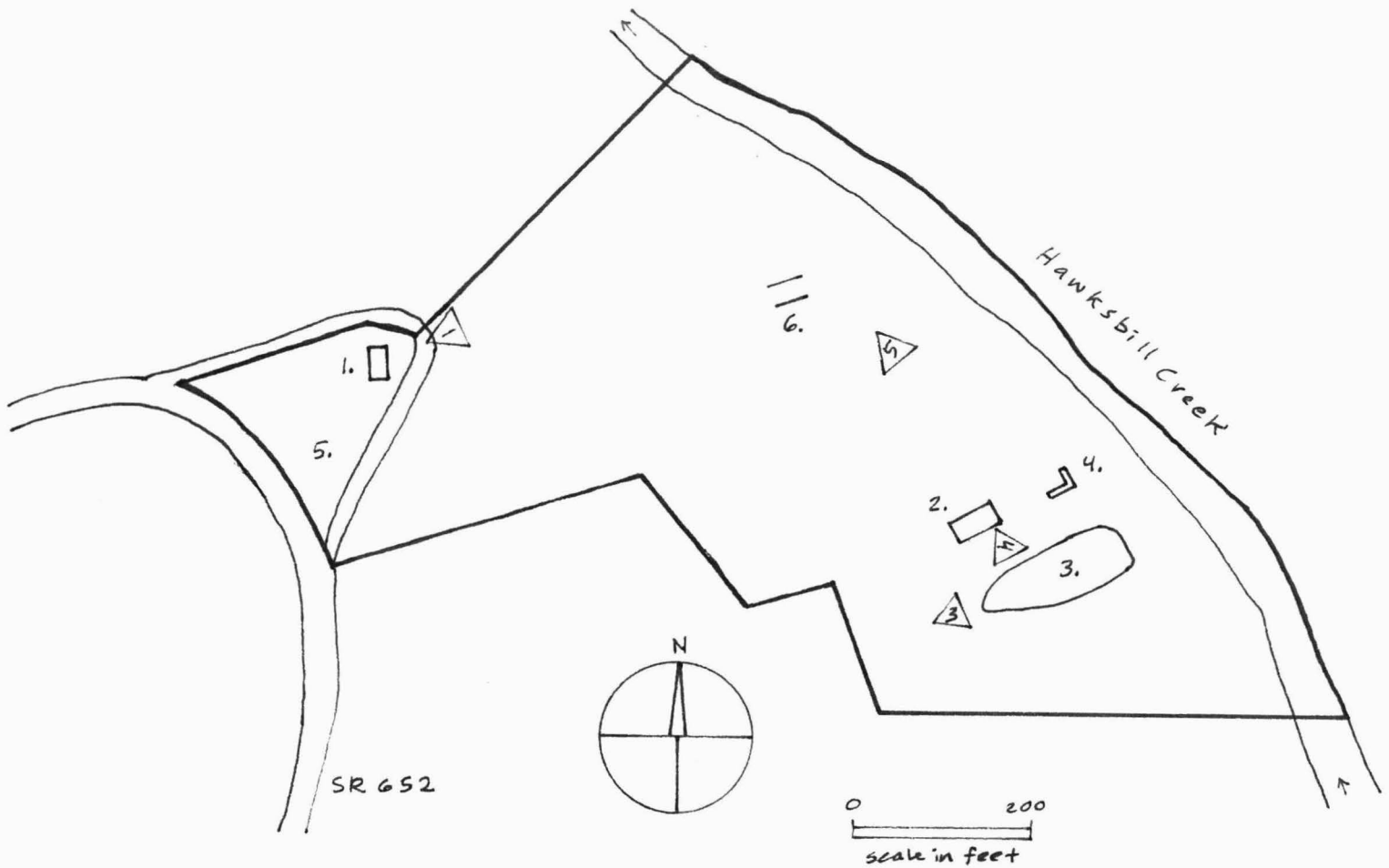
1. DATE: January 2003
VIEW OF: Isabella Furnace Office, east and north elevations; view looking southwest.
FRAME NO: 1
PHOTO: 1 of 5
2. DATE: November 2004
VIEW OF: Isabella Furnace Office; upper level interior.
FRAME NO: 3
PHOTO: 2 of 5
3. DATE: January 2003
VIEW OF: Yager Spring House; view looking northeast.
FRAME NO: 8
PHOTO: 3 of 5
4. DATE: January 2003
VIEW OF: Yager Spring; view looking east.
FRAME NO: 9
PHOTO: 4 of 5
5. DATE: January 2003
VIEW OF: Furnace bridge mound (to left of sycamores); view looking north.
FRAME NO: 6
PHOTO: 5 of 5

Redwell-Isabella Furnace Historic District

Page Co., Va.

District Map

Scale: 1 inch equals approximately 200 feet. Number and direction of view of nomination photographs indicated by triangular markers. Resources (keyed to map) are: 1. Isabella Furnace Office; 2. Yager Spring House; 3. Yager Spring; 4. Foundation; 5. Cemetery; 6. Furnace bridge mound.



5261 II NE
(HAMBURG)

4284

4283

40'

4282

4281

Redwell-Isabella Furnace
Historic District
Page Co., Va.

UTM ref. (zone 17)
I. E721150 N 4284200

