Waterpower on the Winooski: The S.A. Brownell Site as an Archaeological and Educational Resource

by Charity M. Baker

Resources on the River

In 1997, Archaeology Consulting Team, Inc. (ACT) assisted Green Mountain Power Corporation (GMP) with its development of a Cultural Resource Management Plan (CRMP) for its Essex No. 19 hydroelectric project located in Essex and Williston, Vermont (Frink 1997). This CRMP was approved by the Vermont Division for Historic Preservation (VDHP) and accepted by the Federal Energy Regulatory Commission (FERC) in that same year. Recognizing that historic properties cannot be satisfactorily managed in a vacuum and at the expense of other resources, the CRMP is designed to manage multiple resources within the river system as a whole. The plan acknowledges that it is not possible to guarantee the stability of the river system because the dynamic nature and diverse interrelationships of a river system remain largely unknown. The CRMP is instead designed as an ongoing experiment to gather information and to determine appropriate management

Each annual report is designed to supplement the initial planning document and reflect the growing understanding of the originally expressed goals and objectives. Studies discussed in the first annual report included traditional archaeological studies along the impoundment, erosion monitoring studies along the seven-mile stretch of the Winooski River above the dam, and geomorphic analysis of the river system (Frink et al. 1998).

ACT inspected the shoreline and excavated test units to identify sites along the lower 3.5-mile length above the dam in 1996 and 1997. During the studies, the Brownell site was identified on the south side of the Winooski River in Williston. The early nineteenth-century residential and industrial site was listed on the Vermont Archeological Inventory as site number VT-CH-739.

The Brownell site is located on a terrace south of the river, roughly two miles upstream from the dam. Two structural foundations, one with a cellar hole and the second composed of fieldstone sill stones laid on the ground surface, are the visible remains of a house and an associated outbuilding. Both foundations are well above and away from the river's edge, and the site is not presently threatened by erosion or development.

Given its protected state, the site is being preserved in place without intrusive fieldwork studies. Instead, the site is being managed as an educational resource for future programs, and is to be used as a community educational laboratory for archaeological mapping and associated archival research. The site has been examined through surface inspection and through archival research in conjunction with an educational

partnership program initiated with New School, in South Burlington, Vermont. This program was designed to use the Brownell site to introduce participants to archaeologists' techniques, including document research, site mapping, land use pattern evaluations, final written reports, and a proposal for public involvement. The archaeologists and students conducted archival research, examining town history, map, land record, and census documents. The program was suspended due to school schedules and difficulty obtaining permission from the neighboring landowner to visit the site, but we plan to organize similar partnerships with interested organizations in the coming years. This paper presents the initial research results for this archaeological and educational resource.

We began by looking at local histories and nineteenth-century maps for any references to the site. A middle nineteenth-century map of Williston (Walling 1857) depicts a structure labeled with "S.A. Brownell" near the site, but an atlas map published twelve years later (Beers 1869:24) does not. A local history, Look Around Essex and Williston, Vermont, describes that Samuel A. Brownell "purchased a farm and a sawmill along the shores of the Winooski River" in 1800. The following year, Samuel and his bride, Zeruah, "built a log house in which some of their children were born" (Carlisle 1973:44). This information suggests that the visible foundations at the site might represent Samuel and Zeruah Brownell's first Vermont farmstead dating from circa 1800.

Samuel and Zeruah Brownell Family

Lincoln Brownell of Williston recently (1988) published a Brownell genealogy, entitled *Notes on the Brownell Family in Vermont*. The book provides historical and biographical information about the family members, including Samuel Aaron and Zeruah (Forbes) Brownell and their descendants.

Born in Canaan, Connecticut, on June 7, 1778, Samuel Aaron was the second surviving son of Captain Edward (1746-1824) and Susannah (Wells) Brownell. He arrived in Williston, Vermont, in 1800, ahead of his parents and siblings to prepare for their move north. Edward's brothers, Icabod and Aaron, both land speculators, had already settled in Colchester (now Winooski) in 1792 or 1793. On October 3, 1801, Samuel married Zeruah Forbes (1782-1849) of Canaan and they both moved to Williston. Zeruah's grandfather, Elisha Forbes (1731-1765) had been a partner with Ethan Allen at Forbes & Allen, an iron smelting and casting business in Canaan, Connecticut. Her father, John (1760-1835), moved to Vermont sometime after 1800 (Brownell 1988). Zeruah and Samuel Aaron had eight children:

1. William Pierce Brownell (1802-1824), died on April 24

as a result of attempting to break up a log jam at his father's dam on the Winooski River.

- 2. Polly Forbes Brownell (1804-1822).
- Lucy E. Brownell (1806-1880), never married, but kept house for her widowed father and raised her niece, Emily Celestia Brownell.
- Mary Ann Brownell (1808-1858), married Sheldon Douglass, a Williston farmer,
- 5. Chauncey Wells Brownell (1811-1892), bought the Hall farm in southern Williston (544 South Brownell Road), married twice, owned multiple industries, farms and commercial properties in Williston and Essex, and held many town offices.
- George Washington Brownell (1814-1905), was a Williston farmer and drover who lived in the village (693 Williston Road), and married Almira Barry Benham.
- Adelia Hannah Brownell (1817-1908), married Charles Holton and moved to Rochester, New York.
- 8. Philo Forbes Brownell (1823-1872), lived and worked on his father's farm, and minded his brother's, probably Chauncey W., store in Essex Junction. He married Emily Stevens, who died in giving birth to their daughter, Emily Celestia Brownell.

Cellar Holes and Land Surveys

We originally hypothesized that the two visible foundations represented the early nineteenth-century farmstead where Samuel and Zeruah Brownell and their older children first lived, but the location of the first Brownell homestead proved difficult to confirm through documentary research. The Williston land records (WLR) contain multiple transactions involving Samuel, and probate inventories record that he owned at least 553 acres at the time of his death. Subsequent land record and family history research indicate that the visible foundations are actually the remains of the second of three Williston homes that Samuel and Zeruah's family lived in between 1801 and 1869.

Samuel Aaron Brownell bought 103 acres in Williston (land that was considered part of Burlington until 1794) from Jonathan Ormsby for his father in 1800, and bought half of the property from his father the following spring (WLR Vol. 2, p. 386, Vol. 3, p. 50). A land survey done by John Johnson on December 3, 1839 (Figure 1) delineates the division of the 103-acre Lot Number 2 into two halves, and depicts Samuel's long and narrow easterly half.

Lincoln Brownell writes that Samuel and Zeruah, like other "new arrivals," built a log cabin in 1801 "at the outset" (Brownell 1988:5). When the 1839 Johnson map is superimposed on orthophoto maps, the visible foundations are well outside the property owned by the Brownells in 1801 (Figure 2).

In 1808, Samuel bought an adjoining 98.12 acres from Enoch Judson (see Figure 2). Judson had purchased the parcel

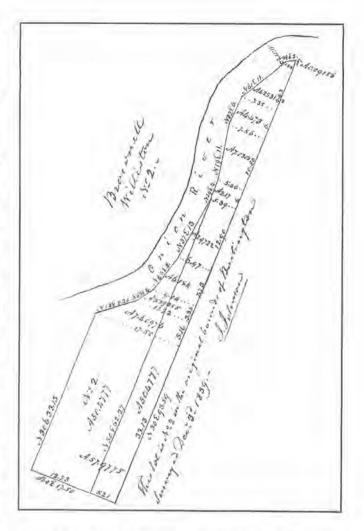


Figure 1. Lot No. 2 in Williston, as surveyed by John Johnson on December 3, 1839 (courtesy of Special Collections, University of Vermont).

in 1806 as part of the 500-acre Lot Number 1, the "Governor's Right" parcel originally granted to Benning Wentworth (WLR Vol. 3, p. 401). Williston land records indicate that Judson subdivided and sold parcels within the original lot over a tenyear period, and that the property served as a financial investment for Judson. Samuel's parcel, initially purchased with family assistance, included the northwestern corner of Lot Number 1, and was bounded to the north by the river just upstream from his sawmill. The two visible foundations are within this parcel. Lincoln Brownell writes that the original log cabin was later "replaced...with a slab board cottage" (Brownell 1988:5). Given this information, the visible foundations appear to be the remains of the slab house and an associated outbuilding that date from as early as 1808.

A circa 1930 manuscript memoir, An American Girl of Long Ago, was written by Laura Chapin Higbee Brownell



Figure 2. The 1839 Johnson map superimposed on an orthophoto map, showing locations of the visible foundations and the 98.12-acre parcel that Samuel A. Brownell purchased in 1808.

Collier (1851-1949). Laura was a daughter of Chauncey Wells Brownell (the fifth child of Samuel and Zeruah). She writes in the third person of visiting "Gran'pa" and "Aunt Lucy" with her father and hearing her grandfather's stories, "... of how after buying land for a farm and a sawmill along the rapid waters of the Onion, as the Winooski River was then called, he went back to Canaan, Connecticut, and returned the next spring with his fearless bride, Zeruah Forbes, on a pillion behind his saddle, of their building the log house in which his second boy, her father, had been born" (Collier circa 1930:12). If Laura's father (Chauncey Wells, b.1811) was born in the log cabin, the second house would have been built after 1811. Although it is possible that the Brownells remained in the original log cabin for ten years, it seems unlikely given their expanding properties. An item in the Burlington Free Press, dated June 6, 1892, narrates:

WILLISTON. The little slab-covered house in which the late Hon. C.W. Brownell was born was afterwards the residence of Mr. Burke, former president of the Mississippi and Tennessee Railroad company, and now a director of the Illinois Central, who visited the spot last September after an absence of 40 years, and the birthplace of ex-Lieut.-Gov. R.S.

Taft, now one of the judges of our Supreme Court. The little house ought not to have been demolished [BFP 1892:4].

It seems more likely that the Brownell family had moved to their second home by 1811, and that the slab house and Laura's "log house" are the same structure. If "Mr. Burke" left the slab house in 1851, as suggested in the newspaper item above, the house stood at least that long. An obituary entitled "Death of Hon. C.W. Brownell. A Tribute to a Well-Known and Public-Spirited Man by a Life-Long Friend" appears on the same page. The tribute is signed by "R.S.T" of Burlington. Chauncey Well's obituary narrates that "Samuel Brownell at first lived in a small one-story slab-covered house...where his son, Chauncey Wells...was born Sept. 13, 1811. No vestige of the old house remains..." (BFP 1892:4).

Russell S. Taft (1835-1902), who held multiple public offices including those listed in the newspaper item, was born in Williston and died in Burlington (Dodge 1912:87). When Taft died, he was chief justice of the Vermont supreme court. It seems likely that he wrote the item about the house, as well as Chauncey Wells' tribute. According to the newspaper item, the Taft family would have been living in the slab house in 1835.



Figure 3, S. A. Brownell structures shown on the 1857 Walling map.

The 1857 Walling map depicts a structure near the location of the visible cellar hole (Figure 3), but the 1869 Beers map does not (Figure 4). The 1869 Beers map shows a structure farther to the south, further downstream along the river within Lot Number 2. One possibility is that the structure shown on Beers is the misplaced slab house. Other structures shown on the Beers' map in this vicinity have been found to be misplaced by Beers during prior archaeological studies (related to the Chittenden County Circumferential Highway [Thomas et al. 1985] and the Chittenden Solid Waster District Transfer Station [Frink and Harris 1995]). Another possibility is that the structure shown on Beers may indicate a different structure altogether (perhaps even the original log cabin), and that the slab house was destroyed sometime between 1857 and 1869. The location of the structure mapped by Beers has been heavily disturbed by past construction related to the International Business Machines (IBM) complex (compare Figures 2 and 4).

Samuel Aaron Brownell's obituary in the Burlington Free Press, dated May 8, 1869, states that, "With the exception of a few years after his marriage during which he lived a short

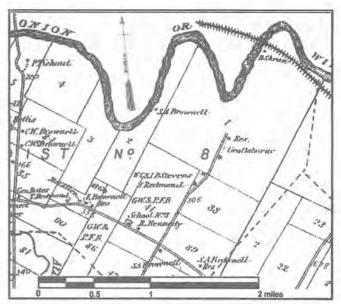


Figure 4. S.A. Brownell structures shown on the 1869 Beers map.

distance west of his last residence, he has resided upon his present estate." The latter house (also shown on maps by Walling [1857] and Beers [1869]) once stood on Mountain View Road, south of his earlier residence(s). Lincoln Brownell records that the later residence, a clapboard frame house, "also grew old and was torn down in the 1970s" (Brownell 1988:5).

Deed research confirms that the Brownell family owned the land containing the visible cellar hole in Lot Number 1 throughout the period that the slab house stood (circa 1808 to sometime between 1857 and 1892). The Burke and Taft families may have leased the house from Samuel and his heirs, but no documentary corroboration of this hypothesis has been located to date. The property was farmed by Philo (Samuel and Zeruah's youngest child), who left one child, Emily (Emma) Celestia (b.1858), when he died in 1872. The properties were later sold to the Redmond family, who farmed the land in the first half of the twentieth century (WLR).

The research suggests that the site, VT-CH-739, is an early nineteenth-century residential and industrial complex that includes properties in Lot Numbers 1 and 2, as defined in early surveys of Williston. The 1801 sawmill and, possibly, the 1801 log cabin are located in Lot Number 2, within GMP landholdings. The site of the identified cellar hole in Lot Number 1, the circa 1808 slab house, straddles lands owned by IBM and GMP.

Sawmill at Little Falls

Due to the amount of labor involved in hauling and sawing



Plate 1. Samuel A. Brownell's circa 1835 saw-mill at Hubbel Falls as it appeared in 1899 (courtesy of Lincoln C. Brownell).

logs by hand, late eighteenth-century European Americans used waterpower and established sawmills to move and saw lumber as soon as they arrived to settle on uncleared lands.

Samuel A. Brownell bought waterpower rights in 1801 and quickly built his sawmill at the Little Falls on the Winooski River (WLR Vol. 3, p. 50). John Johnson's 1839 land survey of Lot Number 2 depicts Samuel's sawmill at the northern extreme of Samuel's long and narrow easterly half of the 103-acre lot (see Figure 1). Land records document that Samuel owned the sawmill and the 20- by 20-rod (330- by 330-foot) lot on which it stood in partnership with others from 1823 until 1849, when he sold the property to his three living sons (WLR Vol. 10, p. 132). His oldest son, William Pierce Brownell (1802-1824), had died while trying to break up a log jam at his father's dam. His various partners during this period, as reflected in the land records, included Willard Mower, Horace Nichols, John and Harry Bradley, Elisha Forbes, Ephraim Groswold, and Timothy Follett. Hemenway's Historical Gazetteer of Vermont, contains an essay entitled "The Lumber Trade" that describes the business:

Justus Burdick and Messrs. Follett & Bradley of Burlington, dealt largely in lumber, and in connection with Samuel Brownell of Williston, carried on its manufacture at the Little falls in the Winooski, between Williston and Essex. They owned boats and shipped direct to Troy, Albany and New York. The rafting was kept until about the year 1835, and from that time until 1843 it was almost all carried by boats, at the latter date the trade had nearly or quite stopped, this section had ceased to produce, and apparently

Burlington had seen the last of the lumber trade. The noble pines of the Winooski valley had disappeared, and the lumbermen had retired from business or had turned their attention to other pursuits [Rolfe 1868:518].

According to an 1883 history of Essex, Samuel built a second sawmill in Essex at the site of the present Essex No. 19 Dam after the particularly devastating freshet of 1830. The history notes that a few years after the "terrible freshet of 1830" swept the whole [mill complex at Hubbel's Falls] away..., a large saw-mill was built just below the bridge by S.A. Brownell, and a new grist and flouring mill between that and the paper mill by other parties" (Butler 1883:35). This second mill site (Plate 1) remained in the family until two of his grandsons by Chauncey Wells (his namesake, Samuel Aaron Brownell II and Chauncey Wells II) sold the property to Green Mountain Power Corporation in 1912 (Brownell 1988:25). Samuel's obituary relates that, "For many years he was extensively engaged in the manufacture of lumber at the Little Falls, on the Winooski, in Williston, in connection with several partners, numbering among them the late John Bradley, Harry Bradley, Horace S. Nichols, and Judge Follett, all of whom he has survived ... and until his last sickness, was in the constant habit of performing the lighter labors in cultivating his lands" (BFP 1869:1). By 1843, when, according to Hemenway, the local lumber trade declined, Samuel would have been 65 years old. Although Samuel did not die until the age of 90 in 1869, it appears that he may have spent more time farming after 1849, leaving the sawmill business to his sons.

The 1850 federal industrial census schedule for Williston

lists "C.W. & G. Brownel" (Samuel's sons Chauncey W. and George) as operating a water-powered sawmill business worth \$4,000. In that year, the mill employed four men, whose monthly wages totaled \$26 each and who processed 4,000 pine and hemlock logs into 400,000 feet of lumber worth six thousand dollars. Although these Williston statistics may apply to the Hubbel Falls sawmill and not the sawmill at Little Falls, the Hubbel Falls sawmill was physically situated on the Essex side of the river. No later mention of the sawmill at Little Falls is made in the documents reviewed to-date. When George Brownell's son, Stanley, sold the 20- by 20-rod lot to the Vermont Electric Company in 1900, he also conveyed its associated "water privileges thereof, and all my right of flowage and to the waters of said River and to construct and maintain a dam across said River connected with, opposite or appurtenant to said premises, for mill, power and all other purposes." However, no mention is made of any existing structures at the site.

Resource Value: What Do We Gain

The S.A. Brownell site has proved itself a valuable archaeological and educational resource. The students at New School were exposed to the less publicized, but important, archaeological research that is performed in libraries and town clerk offices. Through this program, we have gained a historical context for the preserved archaeological components of the site. Preserved components of the site minimally include the circa 1801 sawmill at Little Falls, and, probably, the slab house, dating from circa 1808.

The Little Falls sawmill was established and operated by Samuel A. Brownell from 1801 until 1849, when he sold the business to his sons. With Samuel's purchase of waterpower rights at Hubbel Falls circa 1835 (now the GMP No. 19 Dam) and the general decline of the local lumber trade in the 1840s, the smaller and less accessible mill at Little Falls may have become unprofitable to operate, as its use is not referenced after 1850.

The circa 1808 slab house replaced the Brownell family's log cabin until they moved to a clapboard home a "few years later," as described in Samuel's 1869 obituary. Although land records do not indicate any change in ownership, newspaper articles suggest that the Taft family lived in the slab house in 1835, and the Burke family left the slab house in 1851. Historical maps suggest that the house was no longer standing by 1869, and, according to newspaper accounts, the house had been "demolished" by 1892.

Both the residential and industrial components within the site reflect early nineteenth-century settlement and economic patterns. Their late nineteenth-century abandonment has preserved archaeological information that can improve our understanding of early European American communities in Vermont. As a steward of this important resource, GMP is committed to using resources like the S,A. Brownell site to

educate and inform the public it serves.

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