

Cultural Resources

▶ Discovering New Jersey's Transportation Past

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Digest

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>location:

readington township
hunterdon county

>resource types:

archaeological
mills
blacksmith shop
houses

>action:

data recovery



Readington Township
Hunterdon County

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Life in the Slow Lane

Rowland's Mills: A Deserted Village



This view looking north and upstream along the South Branch of the Raritan River shows Route 31 shortly after the completion of its dualization in 2004. The site of the village of Rowland's Mills lies beneath and alongside this entire stretch of highway [Source: Dewberry].

Two centuries ago the predecessor of today's Route 31, known as River Road and later as Old River Road, meandered north from Flemington to Clinton alongside the South Branch of the Raritan River. In the north-west corner of Readington Township, wedged between the river and Round Mountain, this country roadway passed by a gristmill and sawmill. By 1850, a roadside settlement with a store, post office, workshops and several homes thrived alongside the mills. The village took its name "Rowland's Mills" from the then mill owner, Rynear Rowland. By the late 1920s, when the road was widened, straightened and incorporated into the new state highway system, Rowland's Mills was effectively abandoned, bypassed by the railroads, the gristmill no longer grinding grain for

local farmers. Since then, only the road has flourished, carrying an ever-increasing throng of vehicles along this important regional route.

Over the past five years, Route 31 has been upgraded yet again and the deserted village of Rowland's Mills lay in the path of a major road widening project. These improvements were preceded by extensive historical and archaeological studies, which resulted in design modifications to spare the destruction of several key archaeological resources, and data recovery at other sites that could not be avoided. The recovered history and archaeology offer a glimpse of village life long since vanished; compared with the hectic pace of our modern existence, this was indeed "life in the slow lane."

Anatomy of a Village

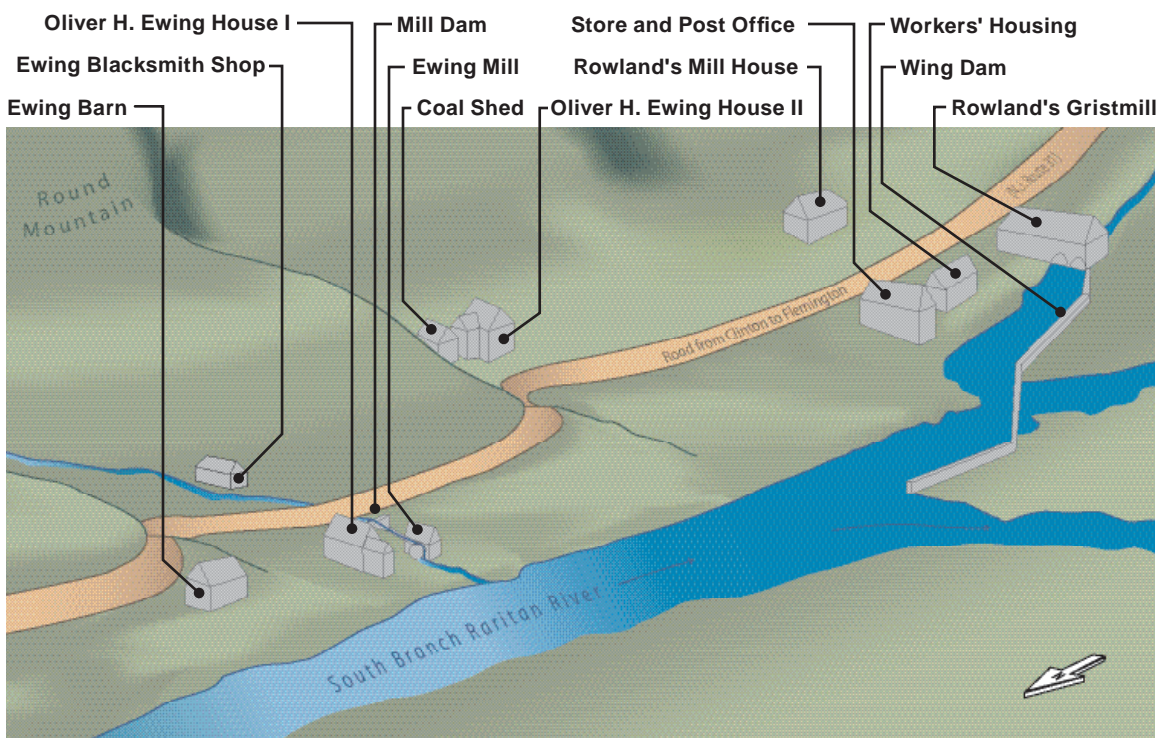
In central New Jersey, as historic villages go, Rowland's Mills was nothing out of the ordinary. It was neither large, nor founded especially early, nor associated with any prominent political figure or cultural icon, and it never developed the economic means to grow into a town. It was literally a rather "run-of-the-mill" sort of place, coalescing gradually over the first half of the 19th century around a gristmill and sawmill complex that originated in the mid-18th century.

The mills and the road from Clinton to Flemington together breathed life into this small community for less than a century until urban and suburban growth in the surrounding region began to siphon off its population and push the village's traditional rural crafts and industry into obsolescence. The surrounding farms and farming families that sustained the community during its mid-19th-century peak of prosperity eventually fell victim to competition from agricultural mass production in the Midwest and technological advances like refrigeration. The village gradually wasted away in the final years of the 19th century and the early years of the 20th century.

Most villages take root in the landscape around a hub in the transportation network, a commercial or industrial focus, or a community facility of some kind. The more firmly planted villages typically display combinations of these features. In the case of Rowland's Mills, it was

the mills - a gristmill founded around 1760 and a sawmill added within a couple of decades - that provided the initial stimulus for village growth. To these were added a store (in place by at least the late 1820s and possibly also doing business during the Revolutionary War era), a blacksmith shop (in operation by 1815), and a post office (a function taken on by the store in the 1850s). Also by mid-century, the village boasted a wheelwright shop (possibly run in conjunction with the blacksmith shop) and a shoemaker's shop.

Despite its steady acquisition of typical village attributes in the second and third quarters of the 19th century, the population of the community remained small, probably never exceeding 50 residents. The village did not figure in the gazetteers of New Jersey compiled by Thomas F. Gordon in 1834 and by John W. Barber and Henry Howe in 1844. Nor was it identified as "Rowland's Mills" on 19th-century maps, which merely show a cluster of buildings along the Flemington to Clinton road - the mills, the store and post office, the blacksmith shop and a handful of residences. While the name Rowland's Mills was apparently in evidence in the mid-19th century, most likely being applied as a means of identifying the post office, the earliest documented reference to the "Village of Rowland's Mills" does not occur until the 1880 census, almost two decades after the death of Rynear Rowland.



This conjectural view looking southeast across the South Branch shows the principal features of Rowland's Mills in the mid-19th century as revealed by historical research and archaeological exploration [Source: Hunter Research, Inc.].



This wall map, published in 1860, depicts the village of Rowland's Mills as an unnamed, loosely arranged string of properties lining the road between Flemington and Clinton. The annotation "S.G. Mill" indicates the location of Rynear Rowland's sawmill and gristmill; "B.S. Sh" marks the site of the Ewing blacksmith shop [Source: Lake, D.J. and S.N. Beers, *Map of the Vicinity of Philadelphia and Trenton*].

For various reasons, the settlement never reached critical mass to the point where it had enough of a social and economic base that could sustain its survival into the modern age. Rowland's Mills only ever boasted a single store and the fortunes of this enterprise were inextricably tied to the mills. There was no inn or tavern or hotel here, no church and no school.

Geography and history both conspired against the growth of the village. The western slope of Round Mountain falls away abruptly to the South Branch of the Raritan River and there is virtually no floodplain or usable flat land on the east side of the river. Buildings - houses, barns and workshops alike - clung to the hillside, pressed up against the roadway shoulder. To the east, the land sloped steeply uphill; to the west, it dropped sharply to the river bank. The topography also influenced the development of the local transportation network to the detriment of the village. The closest road intersection and crossing of the South Branch lay a quarter mile downstream from the mills, away from the emerging nucleus of the village. The first railroad service in the immediate area, provided by the Easton and Amboy Railroad in the early 1870s (a component of the Lehigh Valley Railroad system), ran down the opposite side of the river valley, unceremoniously bypassing Rowland's Mills. All in all, as the second half of the 19th century wore on and the Industrial

Revolution made its presence felt, Rowland's Mills was doomed to become a backwater.

By the 1880s and 1890s, the community was struggling as nearby Flemington and other rail-serviced settlements expanded. In 1881, a contemporary historian, James Snell, described the settlement as a "post village named for a past mill owner," comprising the mills, a post office, a blacksmith shop, a shoe shop and five or six residences. The blacksmith shop likely closed before 1900 and the gristmill struggled on until around 1910, a fading economic concern. By the late 1920s, the gristmill building had been physically relocated and only a few deteriorating homes and secondary structures remained, no real obstacle to the expansion of the highway. At this point, the village was deserted; ever since, the road has ruled.

Mills at the Hub

Rowland's Mills, as its name suggests, was at root a mill-based settlement. Milling was the community's *raison d'être* and, come the second quarter of the 19th century, the mills were alive with the sound of grindstones whirring, lumber being sawn, plaster, flax and linseed being pulverized, and apples being pressed.

The gristmill was the original focus of development in the landscape and the principal stimulus for the growth of the village. Soon after pioneer farmers moved into the area in the mid-18th century, a gristmill was established in the late 1750s, apparently by Jacobus Kinney. This facility, probably a simple frame building erected on stone foundations, drew water from the South Branch with the help of a wing dam. A short head race carried the water from the river to the mill, powering an undershot wheel. Farmers in the surrounding area brought their annual grain crop here for milling into flour and meal. A portion of the product would have been retained for each farmer's home consumption; the rest would have been transported to local markets for sale, some by wagon and some by shallow-draft boats navigating the South Branch.

The mill property changed hands several times in the late 18th and early 19th centuries. By the late 1770s it was owned by Phillip Dilts who was assessed for taxes on both a gristmill and sawmill, providing the first evidence for a sawmill at the site. In the spring of 1782, Dilts advertised for sale "a valuable farm, containing one hundred and thirty three acres ... and there is on the farm a very good gristmill, and a new sawmill, both in good repair." The sawmill probably used the same dam and raceway system as the gristmill, but would have occupied a separate building because the use of space in the two types of mills was markedly different and incompatible, as were the types of machinery employed.

In 1795 Colonel William Dean acquired the mill property and the Dean family maintained control of the mills until 1804. A number of owners followed, culminating in Elijah Warford's acquisition of the

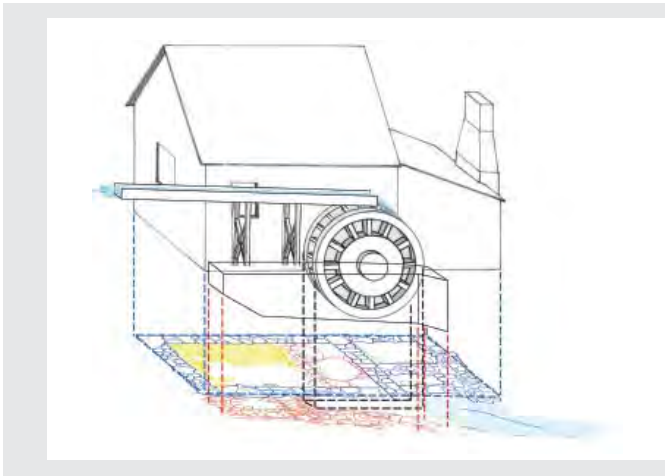
roughly 25-acre mill tract in a sheriff's sale in 1821 for the modest sum of \$305. By this time the mills may have been in poor shape, possibly damaged by flooding or fire. Either Warford or the next owner, wealthy Hunterdonian Joseph Reading (who bought the property in 1824), is thought to have re-built and upgraded the facility, and it is around this time that the settlement begins to solidify as a small village.

The second quarter of the 19th century saw the mill complex take on additional milling functions in an effort to increase its economic return. Under the partnership of William Ketcham and William Johnson, who bought the property in 1832, the complex included a plaster mill where gypsum was ground into lime fertilizer. The next owner, Rynear Rowland, who took over the mills in 1838, processed flax seed into linseed oil (apparently replacing the plaster milling) and operated water-powered carding machinery (probably for breaking down flax stalks into linen fiber, although it is also possible that wool or cotton was being carded). The plaster/linseed oil mill most likely occupied a separate building with its own water power system; carding may have been undertaken there as well, or possibly upstairs in the gristmill.

By the 1850s, after a regional decline in flax production, the mills were focused again solely on processing grain and lumber. But the challenge now for rural facilities like those at Rowland's Mills was to match the output of larger urban-based flour mills and sawmills. Gristmill and sawmill output at Rowland's Mills both approached their zenith during the 1840s, 1850s and 1860s, with Rynear Rowland, a merchant by trade, hiring tenant millers to operate the mills. The actual value of the flour and meal produced at the



In the early 1990s substantial remains of the gristmill at Rowland's Mills still survived in the floodplain. This view shows the mill foundations with its arched raceway openings giving access to the wheel pit [Source: Louis Berger and Associates, Inc.].



The Ewing Mill: Apples to Cider to Applejack

During the archaeological investigations carried out for the recent dualization of Route 31, an entirely separate, hitherto unknown mill site was discovered roughly 1,000 feet north of the main mill complex. Traces of a small mill building, measuring 23.5 by 11.5 feet, were found and linked to the nearby remains of a stone dam and millpond that collected water from a small tributary of the South Branch flowing down off Round Mountain. After careful analysis of the physical evidence, it was deduced that the site was formerly occupied by a cider mill and distillery run by the locally prominent Ewing family (see below) from the late 1820s into the later 19th century. Each year, the Ewings, who lived just across the creek from the mill, would have used this mill to press apples into cider and perhaps also make the New Jersey specialty brandy known as applejack.

gristmill continued to rise slightly through 1870, but the annual output of the sawmill dropped from 77,000 board feet in 1850 to 45,000 board feet in 1870. By 1880, industrial census data for the gristmill shows a marked decline in the volume and value of production, while the sawmill appears to have ceased operation altogether.

Following Rynear Rowland's death in 1862, George Cook, once a clerk in Rowland's store and, from 1856, a part-owner of the mills, quickly sold off the mill property. A succession of owners followed, all of them struggling to run the mills profitably in the face of a regional decline in rural water-powered agricultural processing. The gristmill finally ground to a halt around 1910. In 1921, Charles Alpaugh, founder of

the South Branch Power Company, acquired the mill site as part of a plan to build a series of hydroelectric generating stations along the South Branch. A year later Alpaugh dismantled, moved and re-erected the gristmill building at a new site in Higginsville nine miles downstream. Here the mill enjoyed a final brief burst of water-powered life as a hydroelectric plant supplying energy for lighting homes in the local community. Alpaugh's plans for developing the original mill site were never realized, stymied in part by the construction of Route 30 (forerunner of today's Route 31) in the late 1920s.

Hammer and Tongs Meet Bits and Bytes

Just up the road from the main mill complex, opposite and upslope from the cider mill and distillery, was the second mainstay of the village - the Ewing blacksmith shop, whose forge supplied the surrounding community and passers-by on the highway with all manner of ironwork for much of the 19th century. Oliver Hart Ewing (1793-1871) began working as a blacksmith in Readington Township around 1815, apparently building his shop and a residence on property owned by his father-in-law, James Fonner. In 1824 Ewing purchased the land containing the blacksmith shop, and he and his immediate family operated it until his death nearly half a century later. The shop continued in use until around the end of the century under the ownership of William Fulper, although its output by this time was in decline.

Blacksmithing was the lifeblood of this branch of the Ewing family in the mid-19th century. Oliver and his brother, Gideon, were both making their living as blacksmiths by 1820. Oliver went on to raise three of



The gristmill at Rowland's Mills was moved seven miles downstream to Higginsville in 1922 where it still stands today, converted into residential units, on Three Bridges Road [Source: Hunter Research, Inc.].

of blacksmithing tasks being undertaken, dominated by the routine need for farrier's work and harness parts, for maintaining plows and agricultural equipment, for making and mending farm and household tools, and for producing general hardware items, such as nails and staples. More specialized work on wagons, carriages, sleighs and sleds also formed an important part of the shop's business. Occasionally, the shop took on small jobs involving the repair of mill parts or guns. For major mill repair and maintenance, the mill owners probably resorted to hiring a millwright, but they made abundant use of the local blacksmith shop for all sorts of other ironworking needs.

The most clearly evident seasonally dependent work involved the making, sharpening and mending of plows and harrows. From September through March the shop did little work on agricultural cultivation equipment. Every April, however, there was a tremendous burst of activity in preparation for spring planting, followed by another peak in June for summer planting, and a third in August for fall planting and harvesting. A similar, although less pronounced, seasonal fluctuation was also apparent in the volume of farrier's work being performed. The fact that horses were being used for many other less seasonally dependent duties in addition to dragging plows and harrows over fields (e.g., pulling wagons, carriages and sleighs; serving as mounts for riders) explains why the rise in this activity was more subdued, but for each of the sample day book years, after a lull in farrier's work from January through March, there was still a noticeable increase in shoeing in the late spring. The busiest months for refurbishing old shoes were April through July, consistent with the plowing and planting season, while most new shoes were made in the late fall and early winter.

The Ewings worked with some regularity "ironing" wagons, carriages, sleighs and sleds, i.e., fitting out these vehicles with all the necessary hardware. The shop typically completed between three and seven jobs of this type each year during the 1830s. Entries pertaining to this work stand out very clearly in the book-

keeping records as large jobs for which the Ewings charged considerably more money than for most other tasks (anywhere from \$15 to \$40 or more for ironing a wagon). In the case of wagons and carriages there is no obvious pattern to the time of year when such work was undertaken, but one imagines the Ewings worked on these jobs during slow periods, as and when other business allowed. Work on sleighs and sleds was mostly carried out in the late fall, winter and early spring months. There were few repeat clients, which suggests that wagons and carriages, in particular, were expensive items that were highly valued and carefully maintained for many years.

When viewed in terms of overall annual day book activity and annual blacksmithing income, the shop was clearly busier in the mid- to late 1830s than in the early 1820s and early 1840s. While this may partly reflect broader economic patterns in the village, it is thought more likely that in the 1830s Oliver Ewing had one or both of his two older sons working with him, allowing the shop to take in more business. By the early 1840s, now in their early 20s, these two had likely departed to set up their own blacksmithing enterprises. Oliver's youngest son, Gideon, born in 1826, would probably not have begun his apprenticeship with his father until the early to mid-1840s.



An umbrella-type inkwell, probably of mid-19th-century date, was found on the site of the blacksmith shop. This may have been used in logging entries in the shop's day books and account ledgers, and perhaps supplied the ink for Oliver Ewing's signature shown below [Source: Hunter Research, Inc.].

Interestingly, there is little evidence in the archival record that the Ewing blacksmith shop was affected much by the burgeoning Industrial Revolution and the rise of urban-based metalworking during the circa 1820-55 period covered by the day books and account ledgers. There was a mostly constant pattern of blacksmithing tasks being carried out at the shop from year to year. There is no obvious indication that the Ewings supplied or worked on mass-produced cast iron horseshoes, even though these were being fabricated from the mid-1830s onward. They seem to have continued making their own horseshoes from wrought iron bar stock throughout this period. There is a slight reduction in the proportion of new shoes being made in the shop in 1842 compared with 1834, which might be a function of mass-produced horseshoes entering

From the Day Books: What the Blacksmith Worked On

Horseshoe: Farrier's work; making, mending, sharpening and toeing horseshoes; old and new shoes; pairs and single shoes

Yoke and Harness: Hardware for neck yokes and harnesses, traces and bridles; hooks, rings and links for ox chains and collar chains; saddle parts; stirrups

Plow and Harrow: Making, sharpening and mending plows and harrows; plow shares, plow beams, plow irons, coulter; cutters, harrow teeth; "laying shear"; "sharpening irons"; "turning nose to colter"

Other Farm Tools: Making, sharpening and mending hand tools used on the farm; axes, adzes, hatchets; picks, forks, spades, shovels; scythes, sneaths, straw knives, drawing knives, hoes, rakes; sheep shears, scrapers; crowbars, saws, hammers, chisels, trowels; thatching needles; wheelbarrows; pokers (for lime kiln)

Vehicular: Making and mending parts for wagons, carriages, sleds and sleighs; "ironing" entire wagons, wagon bodies, sleds and sleighs; seats, swivel trees, singletrees, axle trees, lashboards, bolsters, shamble bolts; tires

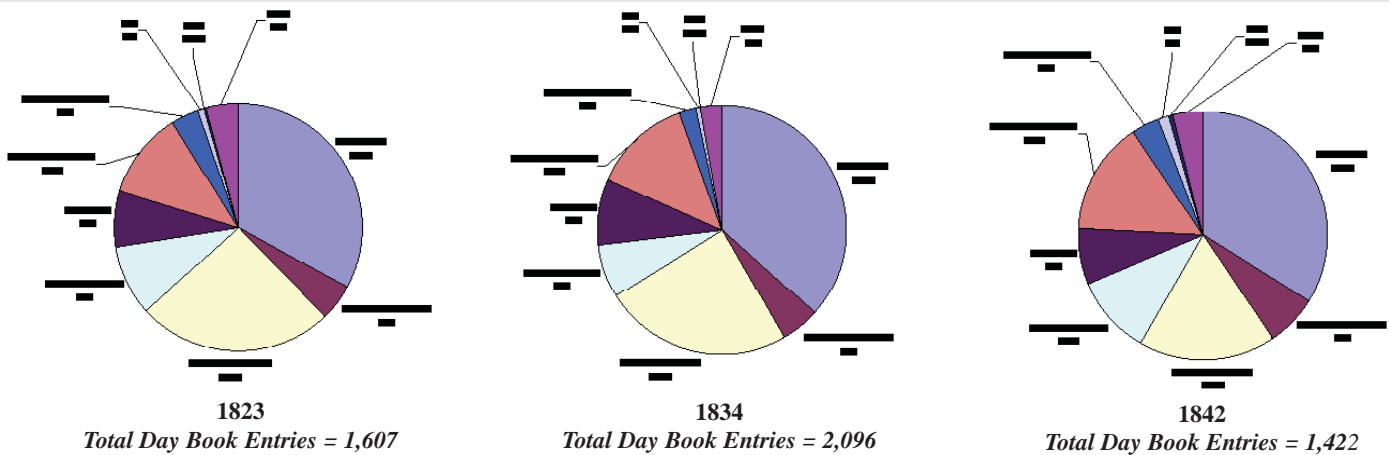
General Hardware: Making and mending various general hardware items; nails, rivets, spikes, bolts, burrs, staples; rings, ring clouts, chain links, clevises, lynch pins, line springs; latches, hinges; wedges; rods

Domestic/Kitchen: Making and mending various domestic and kitchen items; stoves, pots, pans, griddles, bowls, kettles, pails, lye tubs; cleavers, scissors; andirons, trammels, tongs; candlesticks; steel-yards; spinning wheels

Mill: Making and mending mill parts and mill-related tools; windmill cranks; millstone chisels; spindles, lathes, gudgeons; saws

Gun: Repairing guns; gun locks; gun barrels; hooping and bushing gun barrels

Miscellaneous: Various unclassifiable or unidentifiable tasks; mending traps; making plates for meeting house; hooping kegs, cisterns and churns; hooping wheels



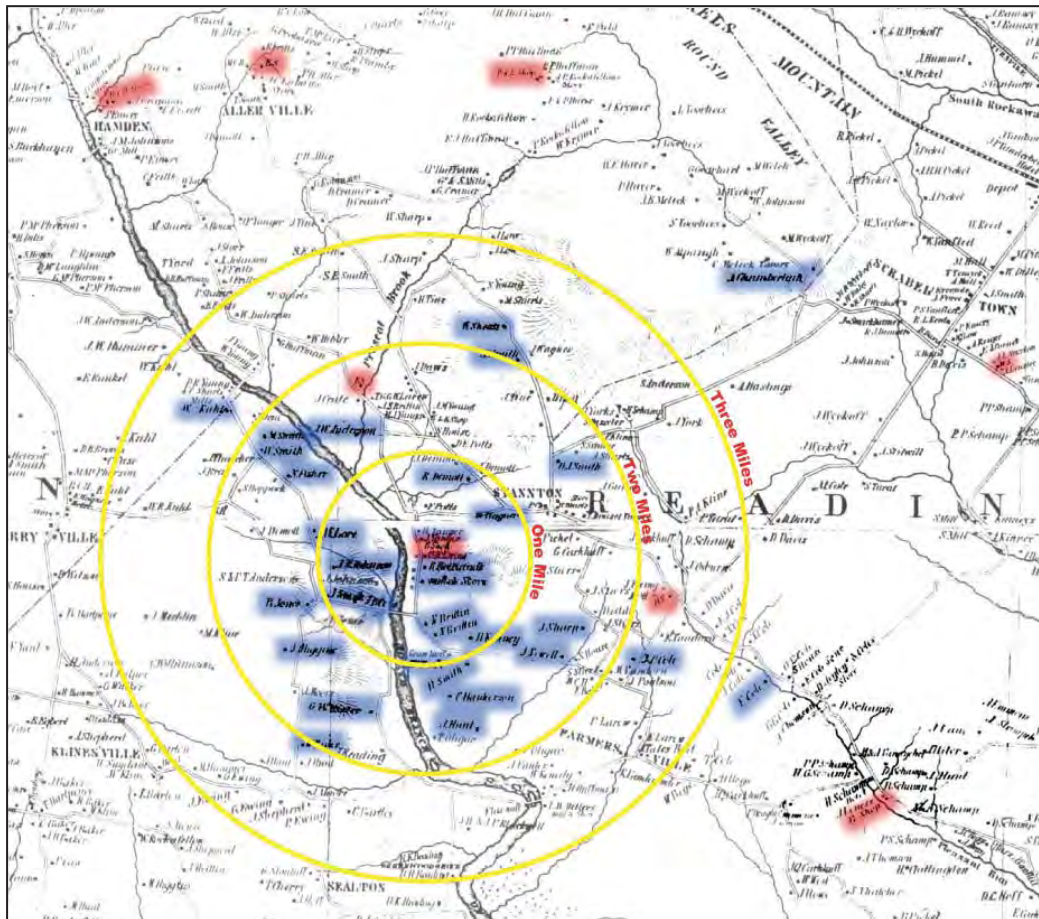
Distribution of work in the Ewing blacksmith shop in 1823, 1834 and 1842 [Source: Oliver Ewing's Day Books and Account Ledgers; Hunter Research, Inc.]

the rural economic system of central New Jersey, but this is by no means certain. The Ewings made very few plows, plowshares and other items of agricultural equipment, perhaps implying that this was already an item whose fabrication had passed into the realm of specialty metalworking. Their plow-related work was overwhelmingly focused on sharpening shares and coulters throughout these years. In contrast, the specialized task of ironing wagons, carriages, sleighs and sleds seems not to have been ceded to the urban carriage manufacturer; the Ewings were taking on such jobs with reasonable regularity into the early 1850s.

The day book and account ledger data do not reveal the source of new iron and steel being used by the Ewing shop, although this likely came from forges and foundries in the nearby New Jersey Highlands. Wrought iron was the main material used, although steel was sometimes used for edging and plating, and the work of the smith often involved repairing cast metal objects. The

archival record does, however, show a sizeable quantity of iron being recycled back into the shop, with the Ewings frequently accepting scrap metal as credit. In the 1820s and 1830s, shipments of coal to the shop figure clearly in the day books in the second half of the year, especially in late October/early November. The Ewings often paid others for, or allowed as credit, the hauling of coal, usually by wagon cross-country from Milford on the Delaware River. By the early 1840s, shipments of coal were no longer recorded in the day books or account ledgers. Probably by this time, the shop had a fixed arrangement with a local coal dealer, and as with the supply of iron and steel, these transactions were recorded separately elsewhere.

On the basis of the bookkeeping information, the Ewings' customer base shows considerable continuity. Typically, between 75 and 100 different customers were served each year, most of them male heads of households (the only women customers were widows)



The Ewings' best customers were correlated with the 1850 census data and matched to a map of Hunterdon County in 1852 to learn where the customers lived (highlighted in blue). Other blacksmith shops in the area were also plotted (highlighted in red). The Ewing shop, in red, is at the center of the range circles [Source: Cornell, S., *Map of Hunterdon County; U.S. Census of New Jersey, Population Schedules; Hunter Research, Inc.*].

and farmers. Several family groupings are evident, suggesting that an element of shop loyalty pervaded the clientele, with the Ewings catering to the children, siblings and other relatives of certain customers. Typically, between 900 and 1,500 blacksmithing-related customer visits were made to the shop each year, while for the period between 1823 and 1842 a core group of roughly 40 repeat customers was recognized making 30 or more visits each year. By correlating the bookkeeping data with the federal census records of 1850, this group of 40 customers was characterized as consisting mostly of local farmers. However, among the most frequent customers were certain key members of the community, such as William Wagoner, the saddle and harness maker, who ranked first in number of visits in all three of the sampled day book years (1823, 1834 and 1842), and successive owners of the mills, Elijah Warford (in 1823), William Ketchum and William Johnson (1834) and Rynear Rowland (1842).

Correlation of the bookkeeping data and the federal census records of 1850 with the Cornell map of Hunterdon County published in 1852, while not permitting every customer's place of residence to be pinpointed, showed nevertheless that the shop's most

frequent clients lived within two miles of Rowland's Mills. Many, not surprisingly, lived within the village itself and several lived in Raritan Township across the river, which during this period was spanned by a bridge a short distance downstream from the mill complex. Careful examination of the Cornell map also showed the Ewing shop operating within a well-developed network of blacksmith facilities spaced typically two to five miles apart across the countryside.

There is a remarkable consistency in the charges for blacksmithing work undertaken by the Ewings over the 20 years covered by the day books from the beginning of 1823 through the end of 1842. In the three sample day book years, charges ranged from as little as 4¢ for the smallest jobs, such as putting a link in a chain or making staples or spikes, to as much as \$40.00 for ironing a wagon. The great majority of day book entries are for single or multiple tasks where the charges range from 6¢ or 7¢ up to \$1.00 per customer. Services were rendered in the form of piecework, not on the basis of time and materials. For the larger, more complex jobs, notably the ironing of wagons, charges were based on weight at a fixed number of cents per pound.

The easiest charges to track within the shop's business are those relating to farrier's work. Shoeing horses was by far the most common task carried out at the shop and it frequently appears as a discrete day book entry, separate from other blacksmithing activities. A clear distinction was made between working on old horseshoes (i.e., reworking and refitting worn shoes) and making new shoes. Thus, throughout 1823, to shoe a horse with one old shoe cost 8¢; to shoe an old pair cost twice this amount, and so on. Sharpening an old shoe typically cost an additional 2¢ per shoe; toeing a shoe (old or new) cost 5¢ extra. To make a new shoe, on the other hand, the shop charged 25¢. The charges for new shoes remained exactly the same in 1834 and 1842, but interestingly the cost of shoeing old shoes dropped from 8¢ per shoe in 1823 to 7¢ in 1834 and 1842. The cost of toeing a shoe likewise dropped from 5¢ to 4¢ in this same period.

Another common set of tasks, also easy to track in terms of charges, were those involving plows. Sharpening plowshares, most frequently done in the spring months, cost 9¢ per share in 1823, but rose to 10¢ per share in 1834 and 1842. Turning the nose on a coulter cost 10¢ in 1823, but could cost anywhere from 10¢ to 13¢ in 1834 and 1842. Carrying out more extensive work on the parts of the plow, such as "laying" or beating out shares, coulters, moldboards or landsides, cost considerably more, usually upward of 70¢, but again there is little variation in charges over the three sample day book years. A new plowshare typically cost between \$1.60 and \$2.50 depending on the size and weight of the share; a set of harrow teeth cost closer to \$3.00. The Ewings made relatively few new plow shares and harrow teeth. For example, in both 1823 and 1842, the shop made three new plow shares; in 1834, five new shares were fabricated. There is only a single record of an entire new plow being made in the three sample day book years - this occurred in 1834 and cost the customer, Adrain Kinney, \$9.00.

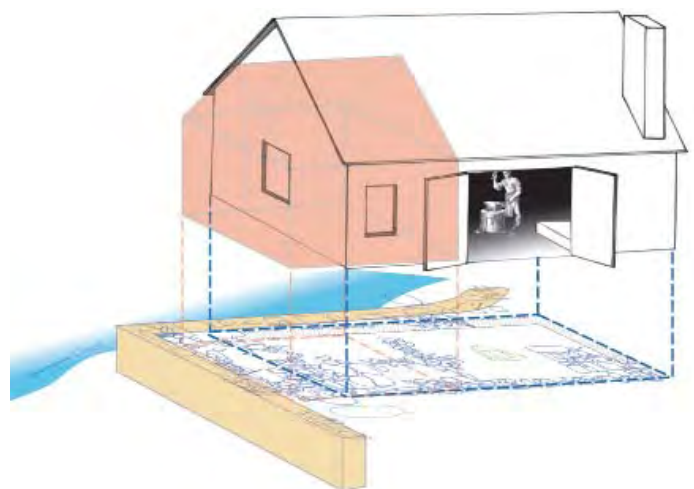
The Ewings received payment for their blacksmithing services mostly in cash, but an element of barter is discernible in the day books and account ledgers. Roughly 10% of payments were in the form of barter in 1823, but this drops to almost 2.5% by 1842, probably an indication of a growing cash economy. Barter payments were made in the form of livestock, foodstuffs, other farm products, coal, iron, other miscellaneous products, and transportation and other

manpower services. Payment was often slow and the Ewings frequently let some accounts remain unsettled for months or even years.

The physical remnants of the Ewing blacksmith shop pale beside the wealth of detail available in the book-keeping records, but they throw a different, no less tangible light on this 19th-century roadside business. Following its abandonment in the early 20th century, the shop was probably cleaned out and pulled down, and its site gradually became obscured through the natural processes of tree growth and soil erosion.

Archaeological excavations in 2000-2001 revealed traces of two main phases of building construction reflecting the erection of successive shop structures on top of a stone and earthen platform. An early shop structure, measuring roughly 12 feet north-south by 15 feet east-west, with evidence of a charcoal-fueled forge in one corner, was found underlying a later, much larger, two-roomed shop measuring 14 feet north-south by 28 feet east-west. The eastern section of the later shop contained the remains of a more substantial coal-fired forge and a centrally-placed anvil. The early, smaller shop is dated to around 1815-1820; the later, larger shop was apparently in use between roughly 1820 and 1900.

Both shops were situated end-on to the main road, each probably with a south-facing double door in the long side of the building giving access on to a nearby lane. Both shops are thought to have been one-story



A conjectural plan and three-dimensional view of the Ewing blacksmith shop. The shaded form at the left represents the earlier shop, circa 1815-20; the larger outlined shop is believed to have been in use between roughly 1820 and 1900. Both shops were erected on a stone rubble platform encased by a retaining wall [Source: Hunter Research, Inc.].



Two telltale types of artifacts found during excavations at the blacksmith shop site were wrought iron horseshoes and cast iron plowshares [Source: Hunter Research, Inc.].

frame buildings set on top of substantial stone footings. They both backed on to a small creek that flowed down Round Mountain into the South Branch, and a spring was conveniently situated just a short distance away up the hill slope. There was an ample supply of water for quenching both hot metal and the blacksmiths' thirst.

Few artifacts - all told, less than 1,700 items - were recovered from the site, which may indicate that tools, equipment and unused stock were deliberately removed from the premises soon after the shop closed. Most of the tell-tale blacksmithing-related artifacts were found within the footprint of the later shop building. Several horseshoes, for example, were found scattered between the anvil and forge. Other artifacts found that were characteristic of the blacksmith's trade include tools such as punches, chisels, files and rasps.

Of particular interest were five plowshare fragments, three of which had a patent date of 1879, clearly placing these artifacts at the shop during William Fulper's (as opposed to the Ewings') tenure. A key point to be made here is that the archaeology of the shop is strongly biased toward its later, if not final, period of usage. As a rural "service industry" facility the shop took in orders for work, completed them, and then sent the newly shod horses, sharpened plowshares, ironed wagons and countless other items on their way. One suspects that very little of the artifact assemblage actually relates to the Ewing family's period of operation of the blacksmith shop.

The Houses

Rowland's Mills at its peak in the mid-19th century was a loose-knit, linear community with a handful of homes straggling along both sides of the Flemington-Clinton road. The awkward terrain, rocky and sloping, meant that houses and other structures were spread out in irregular fashion along the roadside margins. Within the core of the village, which extended north for some 1,400 feet from the main mill complex, archaeological traces of four dwellings were found, two on each side of the road. Homes on the east side were set into the hillside, while those to the west were perched precariously on the narrow strip of land between the road and the river.

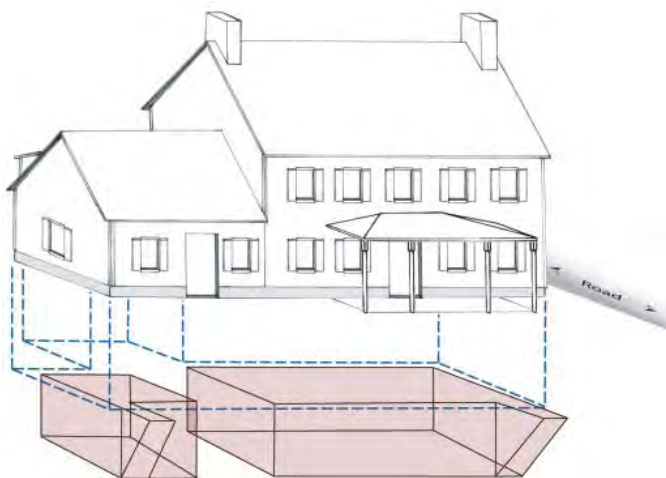
From the late 1750s into the first quarter of the 19th century, only one or possibly two dwellings were in existence, close to the mill site. The dominant home, likely occupied by the mill owner or tenant miller, was located upslope and across the road from the mill complex. Here the remains of a one-room-deep building, 48 by 20 feet in plan with end-wall fireplaces, were documented during excavations in 2000. This house faced west toward the river and the mills, and was probably two stories tall. Its first-floor rear and side walls may have been built in stone, but the rest of the building was likely of frame construction. This dwelling is believed to have been occupied by Rynear Rowland. Fragmentary foundations of an earlier structure were found beneath this house and probably



This view shows excavations in progress at the site of the Rowland house on the east side of the road across from the main mill complex [Source: Hunter Research, Inc.].

represent parts of the original mid-18th-century miller's house. Directly across the road, archaeological survey in the 1980s and 1990s documented the remains of a second house, next door to the store and post office. Possibly dating from the late 18th century, this structure is thought to have been a multiple dwelling occupied by workers at the mills and/or store.

Further up the road to the north stood a pair of houses associated with the Ewing family. West of the road was the original Ewing homestead established by Oliver Ewing either in the second decade of the 19th century or in the early 1820s. Extensive excavations in 2000-01 found the remains of a two-section, south-facing, frame dwelling. A larger two-story, five-bay, Federal-



The main Ewing family homestead, as seen in this conjectural reconstruction, was a substantial two-section building with a large federal-style five-bay frame wing adjoined by a smaller kitchen wing [Source: Hunter Research, Inc.].

style eastern wing, 36 by 15 feet in plan, sat end-on and very close to the road; to the west was attached a smaller kitchen wing, three bays wide, probably a story and a half in height and with a kitchen fireplace at its eastern end. Across the road and further to the south, the Ewings erected a second dwelling, probably in the 1840s. Archaeological investigations showed this building to also be a two-section dwelling. Apparently first rented out to his sister-in-law's family and other villagers, Oliver Ewing himself briefly lived here in the late 1850s and early 1860s, leaving the homestead in the hands of his son, Gideon, and his family.

The Villagers

Throughout its history the leading citizen of Rowland's Mills was most often the mill owner, even though this individual frequently lived elsewhere and was not always a miller. Over the course of the century and a half that the mills were in operation, their ownership changed hands more than 30 times and a dizzying sequence of absentee owners, owner-operators and tenant millers took on the challenge of making them economically viable. Among the most notable absentee owners were David Cock (1757-77), several members of the Dean family (1795-1804), and Joseph Reading (1824-29), each of whom hired tenant millers and mill workers and generally supported the fledgling village. Rynear Rowland, owner of the mills from 1838 until 1862, was somewhat different: a merchant, not a miller, he chose to live in the village, running the store and post office, while overseeing the operation of the mills by others. His elevated commitment to the community is reflected in the village's adoption of his name.

From the 1820s onward, however, much of the "glue" of the community was provided by the extended Ewing family. The central figure here was Oliver Hart Ewing, who married into the Fonner family, long-time owners of lands lying to the north of the mills. Ewing, through the establishment of his blacksmith shop, was largely responsible for stimulating the development of the northern end of the village, drawing in business from his neighbors and surrounding farms. By mid-century, Oliver Ewing had already trained and dispatched to nearby settlements two of his blacksmithing sons, while his youngest son was poised to take over the family shop and homestead. His sister-in-law, Jane

Fonner, was installed in a house recently erected on Ewing property, where his nephew, Oliver, a wheelwright, also lived. The Ewings' nearest neighbors to the north were the Yawgers (also spelled Yanger), a family of shoemakers who were frequent customers at the blacksmith shop. In this manner a tightly woven web of familial and economic relationships revolving around the person of Oliver Ewing sustained much of the village during its mid-19th-century peak of prosperity.

Rynear Rowland died in 1862; Oliver Ewing in 1871. With the passing of these two village stalwarts, the community lost a lot of its vigor. While William Fulper took over the Ewing properties, Joseph Chamberlin and others ran the mills, and local families like the Higginses continued to live in the village in the later 19th century, the population of Rowland's Mills soon began to decline. The settlement was literally deserted by the late 1920s. Almost a century later, archaeological exploration and careful probing of historical documents have brought many of the inhabitants of Rowland's Mills back from the mists of history. This painstakingly compiled information adds substance to the terse biographies found on local gravestones such as those of the Ewings at the Newell Burying Ground on nearby Foothill Road.

**Residents Of Rowland's Mills In 1850
(Grouped by Household)**

Name	Occupation	Value of Property	Age
John Yanger	Shoemaker	\$800	50
Grace Yanger			50
Henry H. Yanger	Shoemaker		26
Ann Yanger			28
Oliver H. Ewing	Blacksmith	\$4,000	56
Elizabeth Ewing			55
Gideon Ewing	Blacksmith		23
Auletta Ewing			19
Martha Ewing			17
Eliza Ewing			13
Oliver Fonner	Wheelwright		24
Jane Fonner			49
Sarah Fonner			22
George W. Cook	Clerk		24
James Cook	Laborer		20
Josiah M. Hutchinson	Miller		46
Sarah Hutchinson			43
Mary Hutchinson			12
Joseph Hutchinson			8
Elizabeth Hutchinson			10
Charles Hutchinson			5
William Hutchinson			3
Randal Hutchinson	Miller		82
Mary Hutchinson			69
Rynear Rowland	Merchant	\$8,000	52
Abigail R. Rowland			38
Caroline Welsh			13
Gabriel Leigh	Clerk		20
James Prost (also wife and child)	Laborer		34
Samuel Brittain	Farmer	\$3,000	67
Charity Brittain			69
Mary Brittain			30
Margaret Brittain			28
Henry Brittain	Miller		29
Mary Brittain			20
George Brittain			1
William Hookle	Laborer		16

Source: U.S. Census of New Jersey 1850, Population Schedules



Project: N. J. Route Dualization Project

Location: Readington Township, Hunterdon County

Date: 1982, 1996, 2006

Consultants: Louis Berger and Associates, Inc. (The Berger Group), 100 Halsted Street, East Orange, NJ 07018

Hunter Research, Inc., 120 West State Street, Trnton, NJ 08608

For More Information...

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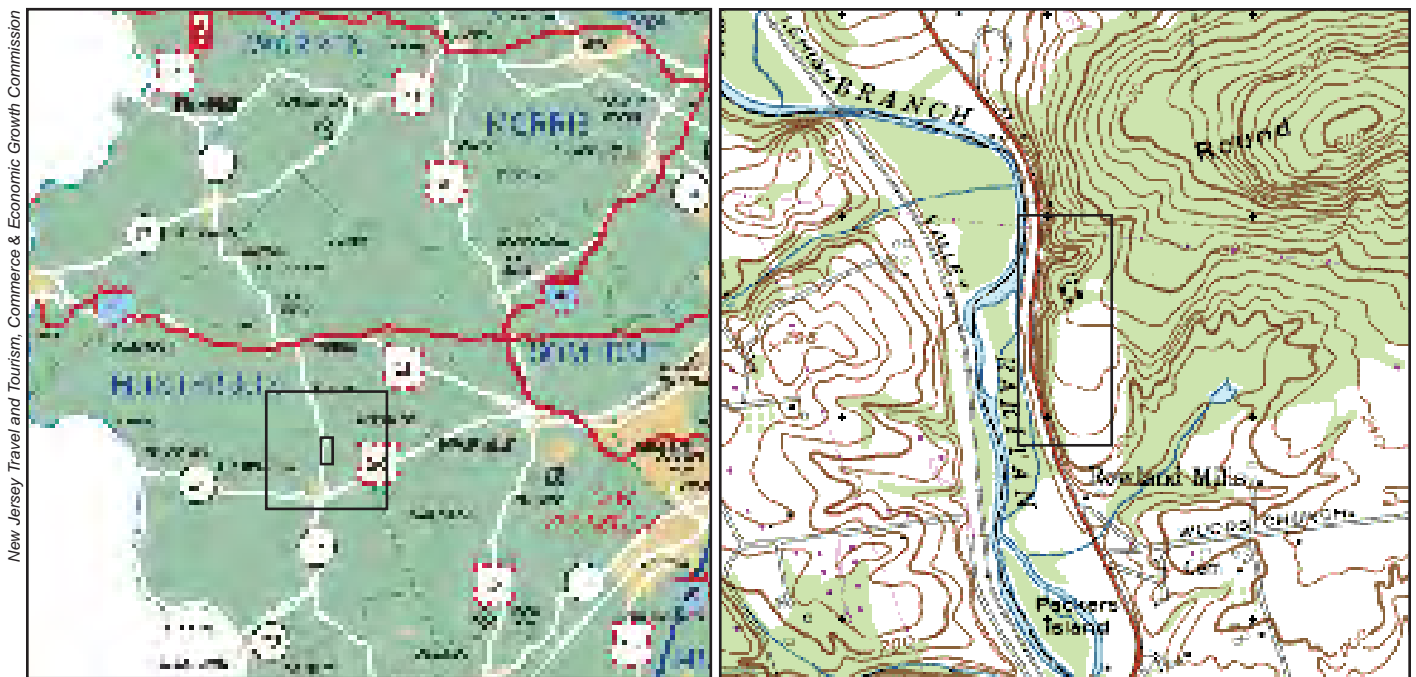
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Stevens, S.B. *Forgotten Mills of Readington.* Privately published, Readington, New Jersey. 1987.

Additional information on transportation projects and historic preservation is available from the Division of Environmental Resources, New Jersey Department of Transportation (<http://www.state.nj.us/transportation/works/environment/overview.htm>), the Federal Highway Administration (<http://www.fhwa.dot.gov/environment/archaeology/index.htm>), the New Jersey Historic Preservation Office (<http://www.state.nj.us/dep/hpo/2protection/njrreview.htm>), and the Advisory Council on Historic Preservation (<http://www.achp.gov/work106.html>).



Project vicinity map

Area of detail