

## NEW HAMPSHIRE DIVISION OF HISTORICAL RESOURCES

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## REPORT ON THE JACOB GERRISH HOUSE NEW HAMPSHIRE DIVISION OF FORESTS AND LANDS MANAGER'S RESIDENCE STATE FOREST NURSERY BOSCAWEN, NEW HAMPSHIRE

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This report is based on a brief inspection of the Gerrish House on the morning of April 24, 1997. Also present at the inspection were architect Thomas Mansfield of DD&M and nursery manager Allen Heiss. The primary purpose of the inspection was to study and diagnose the causes of ice dams and severe roof leaks that have resulted from ice dams during recent winters and to consider necessary repairs to plaster and mortar. An additional purpose of the inspection was to develop a preliminary description of the house as a basis for future study and for future recommendations for care and treatment of the building.

**Summary:** The Gerrish House is a small brick story-and-a-half dwelling with a story-and-a-half wooden kitchen wing. The house was built around 1835, and the wing appears to be contemporaneous with the main brick dwelling. The house retains many characteristics of federal-style joinery, yet has enough Greek Revival features to suggest a date shortly after 1830. The house has been used in conjunction with the State Forest Nursery since about 1911. It retains many original features both outside and within, and should be considered and treated as a state-owned historic dwelling. The quality of original craftsmanship was high, and the house remains in generally good condition.

**History:** According to the Boscawen Historical *Society's History of the Town of Boscawen, 1933-1983* (1983), p. 168 and Map A, the Gerrish House was "built c 1830?" by Jacob Gerrish, possibly on land from Henry Gerrish.

Charles Carleton Coffin provides the following biographical sketch of Jacob Gerrish on page 383 of his *The History of Boscawen and Webster* . . . (Concord, 1878):

The fifth son of Col. Henry and Martha (Clough) Gerrish, [Jacob] was born at the old homestead on the river road, now the Merrimack county almshouse, 10 Nov., 1779. His father was a large landowner, and was able to give each of his sons, as they came of age, a quantity of land suitable for a farm. The portion assigned to Jacob is situated just north of the homestead. He married Sarah, daughter of David Ames, of Canterbury, 15 April, 1803, settled upon his hand, and continued the labor of clearing the rich intervale, surrounding himself with the comforts of home. The farm extended westerly nearly one mile, from the river to the sawmill built by Benjamin and John Kimball, comprising, in addition to the intervale, the low land drained by "Stirrup Iron Brook," and the high land beyond known as "light-gains." The intervale was covered with a growth of large pine trees, which in clearing were rolled into the river to get rid of them.

On this farm he reared a large family. He subsequently added to his estate on the east side of the river, in Northfield and Canterbury, so that he was able to sub-divide and give to each of his three sons a valuable farm. On the completion of his new and substantial dwelling, now standing near the railroad depot, he opened it as a hotel, which he kept for many years. His house was often the head-quarters of the lumbermen from the north, who were engaged in driving logs down the Merrimack to be manufactured into lumber at the mills near the mouth of the Contoocook. He was kind and hospitable to strangers, indulgent to his family, a good neighbor, active in sustaining schools and the institutions of religion, and ready to aid in every effort to advance the prosperity of the town. He died 22 May, 1861.

The 1983 *History of the Town of Boscawen* further indicates that the Gerrish House passed to Jacob's son David Gerrish (born 1816) in 1858, from David Gerrish to Hollis Towne in 1867, from Hollis Towne to Richard Pevere in 1870, from Richard Pevere to Oscar Shaw in 1897, from Oscar Shaw to Lou Shaw in 1910, and from Lou Shaw to the State of New Hampshire for a nursery in 1914.

**Description:** The Gerrish House stands on a stone foundation (not examined) with split and hammered granite underpinning above grade. With the exception of a short underpinning stone at the northeast corner of the north elevation of the house, split by flat wedges, all underpinning stones that show obvious signs of splitting technology reveal the marks of plug drills. This evidence suggests a date after 1830 for the construction of the house.

The eight-inch-thick brick walls of the house are laid in common bond, with eight courses between header courses. The face bricks are well-burned but not pressed. Where it survives in original condition, the tooling of mortar joints was done with a narrow

semicircular channel. Most exterior wall fabric is in original condition, although a small amount of pointing with a harder Portland cement mortar was done near a door that opens onto a modern deck near the northwest corner of the west (rear) wall of the house.

The brick walls are in sound condition, with only slight step cracking above cellar windows near the rear of the house on its north and south ends.

The four front windows of the house have well-hammered granite lintels. The side and rear windows have no visible lintels (except for cellar windows, which have short granite lintels).

All windows bear pintles for exterior blinds and have catches for the bottom rails of blinds. Window blinds survive only on the two most public walls of the house: the front or eastern elevation and the south or driveway side elevation. Surviving blinds match one another and are probably original. They have heavy stiles and rails, joined with through tenons; they have fixed louvers bordered by applied mouldings; and they are unusual in having four rather than the usual three rails, arranged with a small louvered opening above two longer ones.

Window frames are composed of square-edged stock and have no staff mouldings at the juncture of wooden frame and surrounding brick.

Window sashes are six-over-six. The sashes have typical federal-style ovolo-and-fillet muntin profiles. Muntin profiles of sashes in the brick house and in the wooden wing appear to match, although sashes were not studied closely.

The front (east) exterior cornice of the house has no crown moulding, and the fascia board has a strong accumulation of paint that suggests that it never had a crown moulding or attached gutter. The cornice is a boxed cornice with a cavetto bed moulding placed at the juncture of plancia board and frieze. The frieze board has a bead plowed into its lower edge, just above the brick walls.

The rear exterior cornice is similar to that on the front, except that the bed moulding is a narrow, flat board placed at a 45-degree angle. The frieze board is square-edged rather than beaded.

The roof frames of the house and wing have been altered to varying degrees. The main house originally had a rafter-and-purlin frame, probably with six hewn rafters (not counted) along the length of the building, and with six sawn oak purlins on each slope of the roof. This frame remains intact on the front (east) slope of the roof, although at least some of the roof sheathing boards visible from a small trap door above the center hallway are circular-sawn.

On the rear (west) slope, the rafters were left in place, but the purlins were removed. Additional common rafters of two-inch scantling were inserted between the original hewn rafters, creating a common-rafter roof system with roof sheathing running longitudinally. Presumably, this alteration took place shortly after the state acquired the property in 1911.

The roof system of the wing was also rebuilt with common two-inch-thick rafters at the same time. A small door near the floor in the second-floor passageway between main house and wing offers access to the hidden space at the juncture of the main roof and the intersecting roof of the wing, Here, much of the lath is seen to be split board lath (although the wall of the southern bedchamber was replastered with modern sawn lath), and the slope of the roof of the wing appears to follow the original slope. Yet the roof system of the wing is completely of modern stock, showing that the roof of the ell has been removed and replaced for some reason.

This altered roof was given two distinct eaves details on opposite sides of the wing. On the south, facing the driveway, the rafter ends were cut plumb, almost at the wall plate. The exterior eaves detail has very little projection. It is composed of a frieze board with a beaded lower edge and a simple, square-edged cleat nailed to the face of the frieze just below the butts of the shingles.

The northern eaves of the ell, by contrast, have a deep projection. The rafter feet extend well beyond the plate, and the rafters are cut square, rather than plumb, at their ends. The rafter ends are boxed, and the casing on the undersides of the projecting rafter ends follows the slope of the bottoms of the rafters.

The floor plan of the house consists of four main rooms on the first story, arranged as a front and a rear room on each side of a central hallway that extends through the house from the front door. The rear portion of the hallway is partitioned off and is finished as a first-floor bathroom.

Other than the addition of the bathroom, the major change that has occurred to the first-story floor plan is the widening (or creation) of an opening between the northeast parlor and the northwest room behind it. This opening now extends through much of the original partition between these two rooms, allowing the two spaces to function nearly as one. Some attempt was made to finish this widened opening in a sympathetic manner. The opening is trimmed with re-used sections of original door casings that were salvaged from unknown locations somewhere in the house or wing.

The greater part of the first story of the wooden ell is a kitchen, and a fireplace chimney at the western end of the room provides a fireplace and brick oven on the first story. There was probably a summer kitchen (not seen) behind or to the west of this chimney.

The finish of the first-floor rooms is simple but attractive, and is characteristic of late-federal-style or early-Greek-revival style joinery. Only one of the four rooms on the first story--the present dining room at the southwest corner--originally had a fireplace. This fireplace stands almost free of a single-flue chimney, resembling a fire frame (and

perhaps originally intended to hold a fire frame). It has a very large hammered granite hearth.

The other three chimneys have only thimbles for stove funnels, now sealed up. The house was clearly intended to be heated largely by air-tight stoves, a system that was unusually innovative in the mid-1830s.

The house is now heated by an oil-fired forced-hot-water boiler that is vented through the northeastern chimney. All other chimneys are inactive at present except for that in the kitchen, where the original cooking fireplace has been fitted with glass doors and is used occasionally.

In several rooms, a closet stands between the projecting stove chimney and the middle longitudinal wall of the house, providing an unusual amount of storage for a small dwelling.

The central stairhall has a singe-run staircase rising along its southern wall. Newel and angle posts are well-turned from cherry, with a slightly vasiform swelling to the shaft of the post in place of the columnar shaft popular in earlier federal-style turning. Balusters are turned dowels. The handrails are birch, and are composed of a rectangular section with a slightly-projecting, rounded cap.

The door casings of the entry and the front rooms are double casings with a Grecian ovolo backband. Instead of being mitered at their upper corners, these casings are fitted with corner blocks in the Greek revival fashion. Doors leading from the front rooms to the entry are six-paneled, with flat panels, and have delicate applied ovolo mouldings on both faces. Doors in the rear portion of the house have similar mouldings on their faces, and have raised panels with unmoulded stiles and rails on their backs.

The front doorway of the house is recessed into a rectangular opening in the facade. The door is a six-panel door with wide applied Grecian ovolo mouldings around its panels, and is flanked by four-light sidelights. Above the door is a horizontal wooden panel. The door, sidelights, and transom panel are framed by flat wooden members with square grooves plowed into their faces near their outer edges. The transom panel is not expressed on the interior of the house; the area over the front door is plastered.

The second story of the house has a bedchamber on each side of the upper entry. The bedchambers retain much original material, although, as noted above, the western wall of the southern bedchamber is composed of modern lath and plaster, as is the ceiling of the dining room below this chamber.

The second floor of the wing is placed perhaps two feet below that of the main brick house, and is accessible both from a staircase that rises near the chimney from the kitchen below and through a passageway leading down a short flight of steps from the southern bedchamber in the main house. The second floor of the wing is now composed largely of

a single, long room, although two other rooms project over a recessed first-story porch; all second story rooms are lighted by small six-over-six windows set just below the wall plates.

**Condition:** The Gerrish House is in good condition. Efforts have been made to maintain the house and wing in good repair since the state acquired the property in 1911. As noted above, these efforts included the rebuilding of the rear slope of the roof of the main house and the complete re-building of the roof of the wing. The purpose of this work is unclear, but the house may have suffered from chronic dampness or from water leakage, and the original roof structure may have been deteriorated by 1911.

Today, the main problem of the house is water leakage caused by severe ice damming that occurs whenever an appreciable amount of snow accumulates on the roof. Ice dams are particularly severe on the north slope of the roof of the wing and in the shaded valley between the roofs of the wing and the main house. Evidence is clear, however, that ice dams occur with more or less severity on all the eaves of the house, and that leaks also occur around the chimneys.

These ice dams are caused by the escape of heat through the roof. Warming of the roof is caused by the fact that the second floors of both main house and ell are heated and occupied during the winter. The only unfinished attic spaces that remain in the house are the small, largely sealed areas above the second-story ceilings of main house and wing.

To judge by our inspection of the attic space in the main house, the plastered ceilings are insulated only by a small amount of loose rock wool, covered by one layer of fiberglass batts. The slanted ceilings of the bedchambers in the main house are probably insulated by a certain amount of rock wool that was poured between the rafters from the attic space above. The lower zones of the roof slopes of the main house, in crawl spaces outside the knee walls of the bedrooms, are insulated by means of cardboard that has been tacked to the undersides of the rafters, with loose rock wool poured into the space between the cardboard and the roof sheathing. Leaks have caused some of this cardboard to soften and fall, releasing the insulation that was held above the cardboard.

This insulating system permits a greater amount of heat loss through the roof than is desirable. The thinness or loss of insulation in some areas creates especially warm zones on the roof, accelerating the melting of snow in these areas.

We did not inspect the attic of the wing, but the wing has no knee walls and its roof surfaces are therefore probably insulated by rock wool poured between the rafter spaces, and by more rock wool placed above the ceiling plaster.

The attic space of the main house has no ventilation to aid in cooling the roof in summer or winter. The attic of the ell has a small, rectangular louvered opening in the western gable end. It appears that the attic spaces of the main house and of the wing connect with one another at the juncture of the two roofs, so the louvered opening in the gable of the

wing is the only outlet for heat that collects above the second-floor ceilings in both the main house and the wing in both summer and winter.

Severe ice dams have resulted from the passage of heat through the roofs of main house and wing. These dams have caused chronic leakage that has stained the plaster ceilings of the first-floor rooms, has stained the wall plaster below the eaves in both main house and ell, and may have contributed to failure of ceiling plaster in at least two rooms--the northeast parlor and the southwest dining room--of the main house.

A second problem was noted by architect Tom Mansfield during an inspection of the house in the winter of 1997. Excessive moisture from the occupied rooms of the main house caused the accumulation of frost throughout the attic above the two main bedchambers. Evidence of this condensation is seen in the darkening of all roof sheathing and rafters near the trap door in the ceiling above the upper stairhall, and in traces of moisture that has run down the sides of the wooden frame of this trap door. It is evident that condensation in the unventilated attics is severe, and adds to the saturation of roof fabric caused by water leaks from ice dams.

Water leakage is evident around the chimneys of the main house. Due to the roof conditions noted above, it may be assumed that ice accumulates around the bases of these chimneys in the winter. The chimney-to-roof flashing appears to be composed of single sheets of lead set into mortar joints a short distance up the chimneys, then turned out onto the roof and interwoven with the asphalt roof shingles. This flashing detail is not as satisfactory as flashing and counterflashing, which supplies two independent but overlapping components and is far more successful in excluding water. The present chimney flashing also appears to be set into mortar joints of the chimneys too close to the roof; by inserting the flashing at least one brick course higher, the tendency for water to work back between the flashing sheets would be reduced.

Other than these roof problems, the house remains in good condition. A small area of ceiling plaster has fallen from the parlor ceiling near the northeast chimney, probably from poor adhesion to the split-board lath rather than from water damage. The skim coat of plaster has fallen from a small area near the southwest corner of the dining room, revealing that this plastered ceiling is not original one-coat work applied over split-board lath, but rather is three-coat work, almost certainly applied to sawn lath. This small failure may be due to water leakage at the juncture of the main roof and the roof of the wing; evidence of saturation at this point may be seen in the hidden eaves space described on page 3.

The exterior brick walls of the house are in very good condition, with only minor step cracking confined to mortar joints near cellar windows at the western ends of the north and south gable walls of the main house.

The placement of a wooden deck at the first floor level of the juncture of the rear wall of the main house and the north wall of the wing has caused a great deal of roof water to splash against the bricks of the main house. This water has eroded the soft, lime-sand mortar just above the deck. Some of these eroded mortar joints have been pointed with harder mortar containing some Portland cement. This hard mortar has caused the spalling of a few bricks that have been saturated and subjected to freezing. Above this splash zone, the original mortar survives and the bricks are in good condition.