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# Historic Building Assessment for The Audubon Society of New Hampshire's

## Ash Cottage

50 North Shore Road, Hebron, New Hampshire

By

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Stephen Bedard of Bedard Preservation & Restoration, LLC

Completed December 10, 2021



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### **Executive Summary/Introduction**



Figure 1: Location of Ash Cottage at 50 North Shore Road

#### Purpose

The historic building assessment of Ash Cottage has been funded in part by a 2021 grant from the New Hampshire Preservation Alliance, which receives support for its grants program from New Hampshire's Land and Community Heritage Investment Program (LCHIP). The purpose of this study is to document the history, evolution, character-defining features, and existing condition of the building in order to define appropriate future treatment options and needed repairs as New Hampshire Audubon works to ensure the continued use of the building into the twenty-first century.

#### Methodology

In February of 2021, New Hampshire Audubon began to prepare a grant application for the New Hampshire Preservation Alliance to help them figure out a long-term rehabilitation and maintenance plan for the cottage. Preservation consultant Mae H. Williams was first contacted to help guide Audubon through the process of developing a long-term plan. Up until this point, the care of the building has been sporadic with the Society responding to short-term emergency fixes without a long-term plan for the building that properly assesses the long-term ramifications to the historic structure.

This study aims to review the Ash Cottage in terms of determining the character-defining features of the structure, reviewing deferred maintenance, building systems, and building-code compliance and long-term goals of New Hampshire Audubon in order to develop a long -term preservation plan for the building that adheres to the *Secretary of the Interior's Standards*. After the initial conversation, Ms. Williams began collecting a detailed history of the structure, assembling research from historic documents and images at

### **Executive Summary/Introduction**

the Hebron Historical Society, the New Hampshire Division of Historic Resources, New Hampshire State Library, and by consulting historic maps and reading available local histories.

NH Audubon currently has no set long-term plans to change the building use and desires to continue to use the building as seasonal staff housing and classroom space for various programs. Increasing seasonal usability and public access were reviewed as part of this report, however, there is no current desire to winterize the building in order to use it year-round.

A field inspection of Ash Cottage was conducted in August of 2021 with the historic building assessment team meeting on site with New Hampshire Audubon's Conservation Program Director, Marc Nutter. All areas of the building and grounds were explored, documented and analyzed, with notes taken regarding the current condition of the structure, its current and historic systems and its historic integrity, and pulling together all of the necessary information to complete this document.

#### Summary

The first architectural survey of Ash Cottage was conducted in 2018 as part of a community planning survey of the newly re-mapped Cockermouth River floodplain. The original survey document was expanded by New Hampshire Audubon in 2020 in order to list the building to the New Hampshire State Register of Historic Places for its association with the common trend of converting farmsteads to summer homes and as an example vernacular New England farmhouse.

The Cottage is in generally good condition, with some maintenance issues and issues relating to modern accessibility and life-safety building codes. Though some work was done to the building in 2019 to try to remedy water infiltration issues, there are still many aspects of the building that require attention to maintain the historic structure, and to make it more user-friendly for New Hampshire Audubon. The physical needs of the building were noted in the Part III: Conditions assessment, and strategies for addressing these deficiencies were prioritized in the Part IV: Recommendations. The Recommendations also include long-term planning recommendations that relate to things such as ways to increase the usability of the staff housing.

#### Historic Building Assessment Team:

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Ash Cottage was constructed in about 1800 as a small single-family residence on a much larger farm. The building started as a very modest single-story cape at the turn of the nineteenth-century with subsequent tenants adding wings and ells over the next hundred and fifty years as the building evolved to fit their needs. Originally part of a small subsistence farm, the building was used as a summer residence in the twentieth-century when the last major addition was constructed. Since 1979, the building has been the property of New Hampshire Audubon, who has used the house as lodging for seasonal staff as well as small educational workshops that are open to the public. Other than some major foundation work and residing in 2018 in an effort to mitigate moisture, the building has remained untouched since the 1960s.

#### EARLY HISTORY OF HEBRON (CA. 1760-CA. 1800)

Ash Cottage is located at the eastern edge of the small village of Hebron at the northwest shore of Newfound Lake. This area was first settled by Europeans in the 1760s, after the conclusion of the French and Indian War.

The area that would become Hebron was home to Native Americans long before this European settlement: the Lakes Region was rich in food resources with reliable water and convenient transportation and trade routes for Native people during the pre-Contact period. The Penacook group of the Abenaki lived throughout much of the Merrimack River valley in villages surrounded by fields with settlements documented in Meredith Village, the Weirs, Stonedam Island, Holderness Village and Center Harbor. In the 1950s, a major overland native trail was identified along the western shore of Newfound Lake, through what is now the village of Hebron and along the Cockermouth River. The Aquadoctan trail originates in the Weirs in Laconia, travels west though Bristol before turning northwest along the western shore of Newfound Lake. The major Msquamchumaukee and Pemigewasset trails merged to the east of Hebron and connected to the Pemigewasset Indian Village at Plymouth before continuing northwest along the Baker River.<sup>1</sup>

Though European settlers founded the first permanent New Hampshire settlements at Portsmouth and Dover in 1623,<sup>2</sup> it was not until 1725 that Captain John White (1684-1725) explored the area around Newfound Lake. Though many of the Abenaki withrew to the north around 1675-76 in response to European exploration, some native people were still present around Newfound Lake in the 1750s. The last recorded hostile encounter between European settlers and native people in the Hebron area was when Ezekiel Flanders and Edward Emery of Boscawen traveled to the Cockermouth River in 1756. The two men were killed while trapping beaver near the river.<sup>3</sup> The incident is said to have taken place near the headwarters of Bog Book, at a beaver pond between Cooper and George Roads.<sup>4</sup>

<sup>&</sup>lt;sup>1</sup> John D. Bardwell and Ronald P. Bergeron, *The Lakes Region New Hampshire: A Visual History* (Norfolk, VA: The Donning Company, 1989), 32.

<sup>&</sup>lt;sup>2</sup> John Hayward, A Gazetteer of New Hampshire, Containing Descriptions of All the Counties, Towns, and Districts in the State; also of its Principal Mountains, Rivers, Waterfalls, Harbors, Islands and Fashionable Resorts (Boston, MA: John P. Jewett, 1849), 25.

<sup>&</sup>lt;sup>3</sup> R. W. Musgrove, A Guide to Pasquaney Lake (or Newfound Lake) and the Towns upon its Borders (Bristol, NH: Musgrove Printing House, 1910), 6-7.

<sup>&</sup>lt;sup>4</sup> Ronald W. Collins, *The History of Hebron, NH* (Hebron, NH: Collins Publishing, 2008), 12.

The Town of Cockermouth<sup>5</sup> (now Groton and the west part of Hebron) was granted in July of 1761 to George Abbott and sixty-three others.<sup>6</sup> The new grant of 23,600 acres was divided into seventy equal shares.<sup>7</sup> Among the terms of the grant was the requirement that every grantee, his heirs or assigns, needed to plant and cultivate five-acres of land within five years for every 50-acres contained in their portion with the understanding that failure to do so will result in the forfeiture of the grant.<sup>8</sup>

When Plymouth was granted two years later, in 1763 to Joseph Blanchard and others,<sup>9</sup> it included all of present-day Plymouth and the eastern side of what is now Hebron. Plymouth was settled in 1764, with most of the farmsteads concentrated along the intervals of the Pemigewasset and Baker Rivers with a few settlers in the southwest in what is now east Hebron.

Cockermouth was regranted in 1766<sup>10</sup> after the 1761 proprietors had not fulfilled the requirement that every grantee cultivate 5-acres within five years for every 50-acres of his portion. The second grant had nearly identical terms to the first, and reserved five hundred acres in the northwest corner of the Town for Benning Wentworth.<sup>11</sup> Sixty-four proprietors signed for the second grant, three of whom settled in the town shortly thereafter: Stephen Ames, James Gould, and Samuel Hazelton.<sup>12</sup> In order to encourage the settling of the new town, the Charter was renewed in 1772. Though the township had several resident families, the grantees had still been unable to fulfill the settlement requirement.<sup>13</sup> "The largest early land-holder was John Nelson of Boston, a relative by marriage of Governor Benning Wentworth".<sup>14</sup> Another grantee was Samuel Blood, of Groton, Massachusetts, who succeeded in 1792 in renaming Cockermouth after his hometown.<sup>15</sup>

This 1766 grant was successful, and the area that would become the village of Hebron was facilitated by the construction of the College Road through the area in ca. 1770. Early settlers included James Gould/Goold (who built a cabin just south of the Braley Road Bridge near what is now 6 Braley Road in ca. 1770), Capt. Ebenezer Melvin (who purchased several lots in Cockermouth between 1770-1774), Jonas Hobart, Phinehas Bennet, Samuel Farley,<sup>16</sup> and Samuel Hazelton (who built a house at 135 Braley Road in

<sup>&</sup>lt;sup>5</sup> There are multiple theories as to the origin of the name Cockermouth. The township may have been named after the English Lake District market town of the same name, which is located in Cumbria at the confluence of the River Cocker and River Derwent, but there is no obvious connection between the two towns (Collins, *History*, 13). More likely, the new settlement was named after influential English aristocrat, Charles Wyndham (1710-163), 2<sup>nd</sup> Earl of Egremont and Baron Cockermouth (Elmer Munson Hunt, *New Hampshire Town Names and Whence They Came* (Peterborough, NH: Noone House, 1970), 16.). Wyndham was Lord Lieutenant of Cumberland, a Member of British Parliament, and was appointed Secretary of State in succession to William Pitt in 1761. The name may have been given as an effort by proprietors to gain favor with the newly titled Secretary of State and other members of the English government.

<sup>&</sup>lt;sup>6</sup> Edwin A. Charlton, ed, *New Hampshire As it Is* (Claremont, NH: Tracy and Sanford, 1856), 229.

<sup>&</sup>lt;sup>7</sup> Albert Stillman Batchellor, ed, *Town Charters Granted within the Present Limits of New Hampshire* Vol. XXV (Concord: Edward N. Pearson, 1895), 60.

<sup>&</sup>lt;sup>8</sup> Batchellor, Vol. XXV, 61.

<sup>&</sup>lt;sup>9</sup> Albert Stillman Batchellor, ed. *State of New Hampshire Township Grants of Land in New Hampshire Included in the Masonian Patent*, Vol. XXVIII (Concord: Edward N. Pearson, 1896), 194.

<sup>&</sup>lt;sup>10</sup> Hayward, 77 and Hunt, 16.

<sup>&</sup>lt;sup>11</sup> Batchellor, Vol. XXV, 64-67.

<sup>&</sup>lt;sup>12</sup> Collins, *History*, 17.

<sup>&</sup>lt;sup>13</sup> Batchellor, Vol. XXV, 68-69.

<sup>&</sup>lt;sup>14</sup> Hunt, 16. Nelson was prominent in Boston affairs and the family was engaged in the West Indies trade.

<sup>&</sup>lt;sup>15</sup> Hunt, 16.

<sup>&</sup>lt;sup>16</sup> Charlton, 229.

ca. 1770). When Cockermouth reported their population to Congress on October 28, 1775, a total population of 118 was recorded. This number included 23 men aged 16-50, with an additional five serving in the army.

After the Revolutionary War, more people settled in Cockermouth and West Plymouth in ca. 1779.<sup>17</sup> Many of the new settlers were veterans of the Revolution, including Evan Bartlett (who settled at 6 Braley Rd in ca. 1782), and Enos Ferrin (who moved to Hebron shortly after and eventually purchased 41 North Shore Rd in 1830).

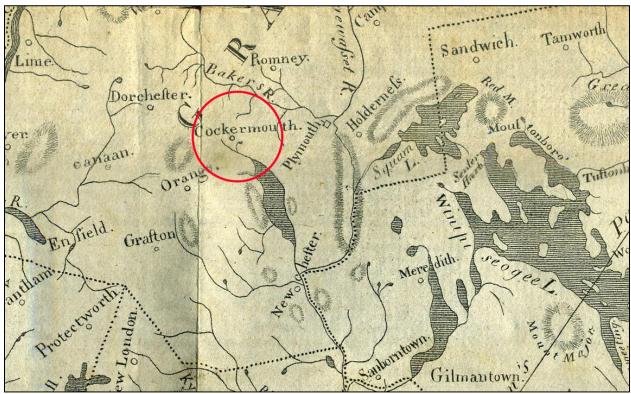


Figure 2: Detail of the 1791 Map of New Hampshire by Jeremy Belknap (from Dartmouth College Digital Collections)

On June 15, 1792 the Town of Hebron was incorporated from the former southeast corner of Cockermouth and southwest portion of Plymouth.<sup>18</sup> The name Hebron was suggested by Samuel Phelps as a reference to his native town of Hebron, Connecticut.<sup>19</sup> The first Hebron Town meeting was held the same month at the home of Jonathan Bartlett.<sup>20</sup> The Meeting was attended by Evan Bartlett, Jonathan Bartlett, Jaazaniah Crosby, Samuel Hazelton, Reuben Hobart, Ebenezer Kendall, John W. Kendall, Simon Lovejoy, Jonathan Morse, Daniel Pike, and William Powers.

<sup>&</sup>lt;sup>17</sup> Hayward, 77.

<sup>&</sup>lt;sup>18</sup> Charlton, 238; Hamilton Child, *Gazetteer of Grafton County, N. H. 1709-1886* (Syracuse, NY: The Syracuse Journal Company Printers & Binders, 1886), 384; Hunt, 57; and Musgrove, 32. Cockermouth was renamed Groton in 1792. Because the territory that would become Hebron was split between Cockermouth (with a population of 373) and Plymouth (625) in 1790, it is somewhat difficult to get a clear sense of the population at this approximate time.

<sup>&</sup>lt;sup>19</sup> Hunt, 57.

<sup>&</sup>lt;sup>20</sup> Child, 387.

#### THE CROSBY HOMESTEAD (CA. 1800-CA. 1890)

The population of Hebron grew rapidly between the 1800 and 1810 census, growing from 281 to 563 in just ten years. It was during this growth in population that the central portion of Ash Cottage was likely constructed as part of a large farm belonging to the Crosby family. The early records for the humble farmhouse are very difficult to trace, making it difficult to tie early town residents to the property. When first constructed, the small homestead farm was a two-room center-chimney cape with an unfinished attic and small basement under the west room.

The Crosby Family had established themselves in Hebron by the first town meeting in 1792. By 1800, a **Jaazaniah Crosby** (1753-1831)<sup>21</sup> was listed as head of a Hebron household of ten consisting of five men and five women.<sup>22</sup> Very little is known about Jaazaniah Crosby other than that he was from Massachusetts, and served for a few days at Roxbury, Massachusetts during the siege of Boston in March 1776.<sup>23</sup> In 1777, he married Elizabeth Gilson, and they had several children including: Elizabeth, Jaazaniah, William, Samuel, Isaac, Mary, and Hannah. Jaazaniah built a simple log hut on Tenney Hill by 1780.<sup>24</sup> By 1810, the household had shrunk to four: presumably Jaazaniah, his wife, Elizabeth, and his two as yet unmarried daughters.<sup>25</sup> Unfortunately, the 1820 US Federal Population Census for Grafton County is missing, creating a twenty-year gap in the records.

By 1830, Jaazaniah's second-eldest son, Col. **Isaac Crosby** (1790-1870)<sup>26</sup> was living on his own in Hebron, possibly at 50 North Shore Road (Ash Cottage). At the time of the 1830 Census, Isaac's family consisted of ten people: himself; his first wife, **Betsy** *Heath* **Crosby** (1796-1861),<sup>27</sup> a man a few years older than himself (possibly a relative or farmhand), six children viz Caroline, Roswell, Martha, Elizabeth, Milo, and Mary; and a man in his 70s (very likely his father, Jaazaniah, who had lost his wife two years prior<sup>28</sup>).<sup>29</sup> In 1823, Isaac Crosby represented Hebron in the New Hampshire Legislature, and in 1850-51 was the Hebron

<sup>&</sup>lt;sup>21</sup> Anonymous, "Find A Grave – Millions of Cemetery Records Online" (<u>www.findagrave.com</u>), Jaazaniah Crosby (1753-1831), buried at Hebron Village Cemetery.

<sup>&</sup>lt;sup>22</sup> 1800 US Federal Census of Hebron, page 1 of 2. A "Jeremiah Crosby" was listed as a head of household of nine in the 1790 US Federal Census of Cockermouth (Hebron) (page 1 of 2). Likely, "Jeremiah" is also Jaazaniah Crosby, as Jaazaniah was known to live in Hebron by 1792, when he attended the first town meeting and "Jeremiah" is the only Crosby listed on this first Census.

<sup>&</sup>lt;sup>23</sup> Anonymous, "Find A Grave – Millions of Cemetery Records Online" (<u>www.findagrave.com</u>), Jaazaniah Crosby (1753-1831), buried at Hebron Village Cemetery.

<sup>&</sup>lt;sup>24</sup> Collins, *History*, 26-27 and Collins, *The Genealogies of Hebron*, *NH* (Hebron, NH: Collins Publishing, 2009), 89, quoting the *History of Charlestown New Hampshire*. Photographs of the later frame Crosby-Jesseman farmhouse remain in the collection of the Hebron Historical Society, and the cellar hole for the building is still extant up on the hill.

 $<sup>^{25}</sup>$  1810 US Federal Census of Hebron, page 1. Son William Crosby (1784-1867) is listed separately on the 1810 Census as the head of a household of six. Neither Samuel nor Isaac are listed, and it is possible that they lived with their brother at this time.

<sup>&</sup>lt;sup>26</sup> Anonymous, "Find A Grave..." (<u>www.findagrave.com</u>), Col. Isaac Crosby (1790-1870), buried at Hebron Village Cemetery.

<sup>&</sup>lt;sup>27</sup> The couple married in Groton in February of 1815. Anonymous, "Find A Grave..." (<u>www.findagrave.com</u>), Betsy *Heath* Crosby (1796-1861), buried at Hebron Village Cemetery.

<sup>&</sup>lt;sup>28</sup> Anonymous, "Find A Grave…" (<u>www.findagrave.com</u>), Elizabeth *Gilson* Crosby (1754-1828), buried at Hebron Village Cemetery.

<sup>&</sup>lt;sup>29</sup> 1830 US Federal Census of Hebron, Household of Isaac Crosby (page 5 of 8). Isaac's brother, Samuel was also listed as a head of house in 1830 (page 7 of 8).

delegate to the Constitutional Convention.<sup>30</sup> In 1831, Isaac Crosby, along with his brother Samuel and associates, formulated the First Congregational Society of Hebron.<sup>31</sup>

By 1840, Isaac's household consisted of seven members: him, his wife, and five of his children.<sup>32</sup> By 1850, Isaac (then 60) and Betsy (55) were sharing their home with their 24-year-old son Milo's young family: Milo H Crosby (b. 1826), Harriet B *Heath* Crosby (b. 1826), and Edward Dudley Crosby (b. ca. 1849).<sup>33</sup> Isaac was described by the census as a farmer, and it is likely that the Ash Cottage property was largely open farmland and pasture with several outbuildings in addition to the cottage.

The north ell of the building was likely added at approximately this time (between ca. 1820-1850), likely to accommodate either a growing family or some kind of home industry.<sup>34</sup>

Meanwhile, in 1842,<sup>35</sup> Isaac Crosby's eldest son **Roswell Crosby** (1817-1853)<sup>36</sup> married **Mary Ann Ferrin** (1819-1885).<sup>37</sup> Sadly, Roswell died only ten years after his marriage, and Mary was made a widow in 1853. By 1860, when the H. F. Walling "Topographical Map of Grafton County" was drawn, the Crosby Homestead was identified as the residence of "Mrs. Crosby" (figure 3). The 1860 Census lists Mary A. Crosby (41) as the head of house with \$300 in real estate and \$635 personal estate living with her sons Charles R (15) and Isaac (7).<sup>38</sup>

Roswell Crosby's widow, Mary Ann *Ferrin* Crosby seems to have remarried in the late 1860s and moved to Haverhill with her new husband Samuel Carr by 1870.<sup>39</sup> The east wing kitchen addition may have been constructed by Mary *Ferrin* Crosby. The physical evidence suggests that the addition was built sometime between about 1850 and 1870, possibly either shortly after her husband's death or shortly after she sold the building and moved to Haverhill.

<sup>&</sup>lt;sup>30</sup> Collins, *History*, 143 and 142.

<sup>&</sup>lt;sup>31</sup> Collins, *History*, 58.

<sup>&</sup>lt;sup>32</sup> 1840 US Federal Census of Hebron, Household of Isaac Crosby (page 7 of 8). Daughter Martha, who was an infant at the time of the previous census had only lived for a little over a year, passing on August 27, 1871 (Anonymous, "Find A Grave..." (www.findagrave.com), Martha Crosby (1820-1821), buried at Hebron Village Cemetery).

<sup>&</sup>lt;sup>33</sup> 1850 US Federal Census of Hebron, Household of Isaac Crosby, dwelling 56, family 60 and Miles H. Crosby, dwelling 56, family 61. Milo and his family moved to Bristol in the 1860s, where he was a successful lumber manufacturer (Anonymous, "Find A Grave..." (www.findagrave.com), Milo Heath Crosby (1726-1915), buried in Homeland Cemetery, Bristol.

<sup>&</sup>lt;sup>34</sup> The construction of the north ell across the façade of the building and toward the road is an unusual design choice, and might be explained if this section of the building served a public purpose and was used as some kind of shop.

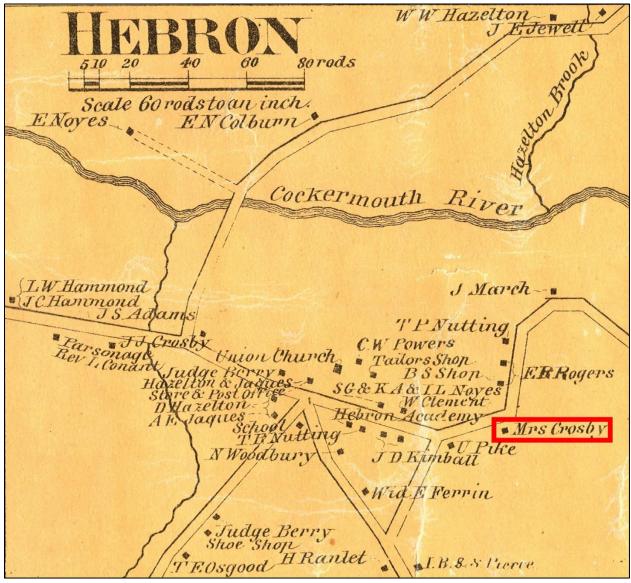
<sup>&</sup>lt;sup>35</sup> New Hampshire Bureau of Vital Records, "New Hampshire Marriage Records, 1637-1947" (www.familysearch.org), marriage of Roswell Crosby and Mary Ann Ferrin.

<sup>&</sup>lt;sup>36</sup> Anonymous, "Find A Grave..." (<u>www.findagrave.com</u>), Roswell Crosby (1817-1853), buried in Hebron Village Cemetery.

<sup>&</sup>lt;sup>37</sup> Anonymous, "Find A Grave…" (<u>www.findagrave.com</u>), Mary Ann *Ferrin* Crosby (1819-1885), buried in Hebron Village Cemetery.

<sup>&</sup>lt;sup>38</sup> 1860 US Federal Census of Hebron, Household of Mary A. Crosby, Dwelling 473, Family 487. Unfortunately, Roswell and Mary Crosby seem to have been missed by the 1850 census: they are not listed in Hebron nor anywhere else in Grafton County.

<sup>&</sup>lt;sup>39</sup> United States Federal Census of Haverhill, Household of Samuel Carr, dwelling 372, family 384.



*Figure 3: Hebron Village in 1860 (H. F. Walling, "Topographical Map of Grafton County, New Hampshire." New York: Smith, Mason & Co., 1860.)* 

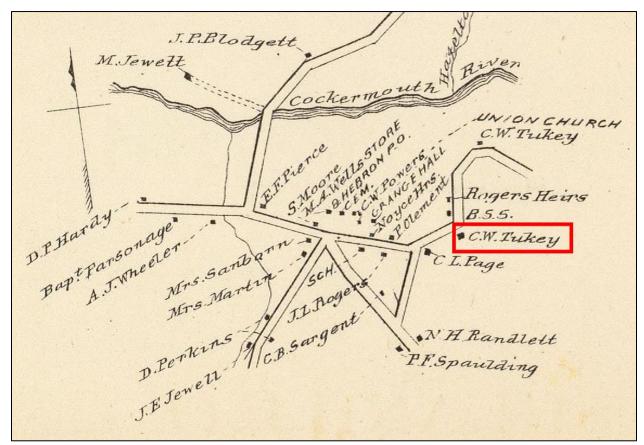
Hebron's population oscillated through the years leading up to the American Civil War: the population in 1830 was 538, in 1840 it was 505, and in 1850 it was 565. By 1860, the population began to decrease, falling to 475 as many local residents began to abandon their small subsistence farms and either head out west to larger less rocky farms or to the cities to work in factories. The population continued to drop through the second half of the 19<sup>th</sup> and early 20<sup>th</sup> century, reaching a low in 1950 of only 130 (since the mid-20<sup>th</sup>-century, the population has gradually risen to 602 by 2010).

As of writing it is unclear who lived in the Crosby Homestead/Ash Cottage from the time Mary Ann *Ferrin* Crosby moved to Haverhill until 1892. A 1935 property deed refers to the lot at that time including "in this conveyance...a portion of these premises inherited from Charles W. Tukey, late of Hebron, N. H. deceased,

who is supposed to have purchased a portion of real estate from one Samuel Hollon in 1883".<sup>40</sup> It is quite plausible that Hollon is a miss-spelling of Holland. A shoe-maker named Samuel Holland (b. ca. 1813) lived in this area of Hebron Village with his wife Harriet C. (b. ca. 1819) in 1880, possibly in the former Crosby residence.<sup>41</sup>

#### THE COTTAGE AS A SUMMER HOME (CA. 1890-1978)

By 1892, the Crosby Homestead farm and nearby March Homestead/Robertie House/Elm Mere Farm (HEB0011/99 North Shore Road/Map 17-Lot 3) had been sold to C. W. Tukey<sup>42</sup> (figure 4). Charles William Tukey was born in Portland, Maine in 1828, and resided in Cambridge, Massachusetts at the time of his death in 1905.<sup>43</sup>



*Figure 4: Hebron Village in 1892 (D. H. Hurd &Co.* Town and City Atlas of the State of New Hampshire (*Boston: D. H. Hurd & Co., 1892)*)

<sup>&</sup>lt;sup>40</sup> Grafton County Registry of Deeds, Book 655, page 492. Unfortunately, the Grantee/Grantor indexes for Grafton County are not available online and it was not possible to trace the deed back further at the time of writing.

<sup>&</sup>lt;sup>41</sup> 1880 US Federal Census of Hebron, Grafton County, household of Samuel Holland dwelling no. 76, family no. 78. The census takers in Hebron did not follow the linear approach to the census seen in some towns, so both the 1870 and 1880 census lists do not strictly follow the order of houses, making it difficult to say for certain who lived where. Also, neither Samuel or Harriet were traced to any other historical documents, suggesting that they may have only lived in the village briefly before moving on.

<sup>&</sup>lt;sup>42</sup> D. H. Hurt & Co., Town and City Atlas of the State of New Hampshire (Boston: D. H. Hurd & Co, 1892).

<sup>&</sup>lt;sup>43</sup> Anonymous, "Find A Grave..." (<u>www.findagrave.com</u>), Charles William Tukey Sr. (1828-1905), buried in Woodlawn Cemetery, Everett, Massachusetts.

Though there is no evidence that Charles lived in Hebron, his son, farmer **Fred Herbert Tukey** (1862-1935),<sup>44</sup> married Alpharetta Wheeler in Hebron in 1895, and resided at Elm Mere Farm by 1900.<sup>45</sup>

F. H. Tukey, was one of several Hebron men known to have taken on summer boarders between 1900 and 1910,<sup>46</sup> likely housing the visitors at what is now Ash Cottage. The second ell addition (south ell) was added off of the kitchen at about this time, likely by Tukey in an effort to make the property more accommodating to summer guests. This new addition provided an additional dining room and modern bathroom. The open porch at the east end of the east wing was also likely added at approximately this time to provide a space for summer visitors to sit and take in the views over Hebron Bay of Newfound Lake.

After Fred Herbert Tukey died in January of 1935, the family properties were sold. Tukey's wife, Alpharetta had died three years earlier, and only one of his heirs lived in New Hampshire (his niece, Mildred I Soulee). According to the property deeds all of his other heirs were living out of state: Frank A. Tukey was in White Plains, New York; Irene R. LaFetra was in Oyster Bay, New York; Earl B. Tukey was in Somerville, Massachusetts, Adelaide G. Burpee was in Malden, Massachusetts, and Charles W. Tukey was in Boston, Massachusetts.<sup>47</sup> The former Crosby Homestead was sold at auction on January 15, 1934 to the Norton, Inc. of Darien, Connecticut for \$75.<sup>48</sup>

Norton, Inc. was the company of **Evermont Hope Norton** (1873-1961).<sup>49</sup> Norton was born in Lousiville, Kentucky, and graduated from the University of Virginia in 1895. He began working as a stockbroker on Wall Street in New York in 1896 and was a senior partner at Norton & Tunstall until 1899, when he married his first wife, Lillie Morrison Carr (1876-1941).<sup>50</sup> At the same time as he was establishing himself as a day-trader, Norton became heavily involved in the railroad industry: purchasing the controlling interest in the Michigan Traction Company in 1897, and financing the building of the Columbus, Lima and Milwaukee Railway in 1898.<sup>51</sup> He went to South America in 1911, as president of the Guayaquil and Quito Railway Company. He developed the Ecuadorian Railroad, which travels from the Pacific coast and over the Andes Mountains. He worked in Naval intelligence in World War I.<sup>52</sup> Though he had properties all over the United States, Norton's primary residence was in Darien, Connecticut.<sup>53</sup>

On August 17, 1939, Norton, Inc. (headed by E. Hope Norton), sold the Ash Cottage property to **Hope** *Norton* **Iaccaci** (1903-1999) of Darien, Connecticut.<sup>54</sup> Hope was E. Hope and Lillie's oldest child, and had married Paul Thayer Iaccaci (1890-1965) in 1924. After attending Harvard college from 1909-1911, Paul Iaccaci and his brother August served in the 7<sup>th</sup> Regiment N.Y.N.G. from 1913-1916 and joined the

<sup>&</sup>lt;sup>44</sup> Anonymous, "Find A Grave…" (<u>www.findagrave.com</u>), Fred Herbert Tukey (1862-1935), buried in Hebron Village Cemetery.

<sup>&</sup>lt;sup>45</sup> 1900 US Federal Census of Hebron: Household of Fred H. Tukey (Dwelling No. 141)

<sup>&</sup>lt;sup>46</sup> Collins, *History*, 91.

<sup>&</sup>lt;sup>47</sup> Grafton County Registry of Deeds, Book 651, page 263.

<sup>&</sup>lt;sup>48</sup> Grafton County Registry of Deeds, Book 651, page 263 and New Hampshire Audubon Society website (www.nhaudubon.org).

<sup>&</sup>lt;sup>49</sup> Anonymous, "Find A Grave…" (<u>www.findagrave.com</u>), Evermont Hope Norton (1873-1961), buried at Woodlawn Cemetery, Bronx, New York.

<sup>&</sup>lt;sup>50</sup> Anonymous, "Find A Grave…" (<u>www.findagrave.com</u>), Lillie Morrison *Carr* Norton (1876-1941) is buried at Woodlawn Cemetery, Bronx, New York.

<sup>&</sup>lt;sup>51</sup> Press Biographical Company, *The Successful American* (New York: The Press Biographical Company, 1899), 38.

<sup>&</sup>lt;sup>52</sup> Anonymous, "Find A Grave…" (<u>www.findagrave.com</u>), Evermont Hope Norton (1873-1961), buried at Woodlawn Cemetery, Bronx, New York.

<sup>&</sup>lt;sup>53</sup> 1920, 1930, and 1940 US Federal Census Records, Darien, Connecticut: Household of E. Hope Norton.

<sup>&</sup>lt;sup>54</sup> Grafton County Registry of Deeds, Book 685, page 371.

Canadian Royal Flying Corps in 1917. They were assigned to the No. 20 Squadron in Calais, France in 1918 and by September of that year he had 17 victories and received the Distinguished Flying Cross for shooting down six enemy airplanes (two he shot down himself, four were destroyed with the assistance of his observer).<sup>55</sup>

After their marriage, Hope and Paul made their primary residence in Darien, Connecticut with her three sons from her first marriage to George E. Stevens and their daughter, Thayer. The couple used the Ash Cottage as a vacation home, erecting the approximately eighteen-foot-square garage in the mid-twentieth-century, possibly reusing older doors from a former outbuilding. The couple constructed a patio at the south elevation of the original cape, which they enclosed to create the large sun room addition in 1963. In 1969, a second bathroom was added in one of the rooms of the north ell.

#### NH AUDUBON'S ASH COTTAGE (1979-PRESENT)

January 17, 1979, Hope Norton Iaccaci donated her Hebron property (which consisted of three separate parcels) to the Audubon Society of New Hampshire in memory of her late husband. The first tract contained the former Crosby Homestead and a garage which Hope maintained the right to maintain for the rest of her natural life. The deed further stipulated that the "Cottage...shall be maintained by the Grantee, its successors and assigns, in a state of good repair, and shall be used for administrative office purposes and as a center for research and the instruction of public school children and members of the public..."<sup>56</sup> The second tract was a 10-acre meadow that she had purchased from Fred Clement and Harry S. Morgan in 1902;<sup>57</sup> and the third tract was undeveloped land on the south side of North Shore Road.<sup>58</sup>

Hope Norton Iaccaci continued to use the Cottage as a summer residence throughout the 1980s, installing a memorial plaque in memory of her husband, Paul Thayer Iaccaci on July 18, 1985, the same day that she deeded the field across the street (now Hebron Marsh Sanctuary) to NH Audubon.

In the years since, NH Audubon has done periodic maintenance to the building on an as-needed basis. In August of 2001, a new artesian well was installed to the southwest of the house by James Gray Water Wells.

Some major building restoration work was done in 2018-2019 by Michael Lemieux of Groton in an effort to mitigate water infiltration beneath the building.<sup>59</sup> Mike started by removing the porch deck, and supporting the porch roof. He then removed the original rubble-stone foundation, and jacked the building up 8". He then replaced the building sills with pressure-treated material and installed new granite underpinning. The second year he focused on the north ell, where he also removed the rubble stone foundation. He excavated beneath the building and installed all new pressure-treated sills and joists, as well as some new electrical wiring and water pipes before installing the new granite sills. Once the foundation work was completed, Mike began replacing the exterior clapboards.<sup>60</sup> Mike wrapped the building in Tyvek and affixed new cedar clapboards affixed with modern nails. French drains were also

<sup>&</sup>lt;sup>55</sup> The Aerodrome website (1997-2001): Paul Thayer Iaccaci (<u>http://www.theaerodrome.com/aces/usa/iaccaci2.php</u>) and Wikipedia, "Paul Thayer Iaccaci" (<u>https://en.wikipedia.org/wiki/Paul Thayer Iaccaci</u>).

<sup>&</sup>lt;sup>56</sup> Grafton County Registry of Deeds book 1360, page 824-825.

<sup>&</sup>lt;sup>57</sup> Grafton County Registry of Deeds book 950, page 293 and book 461, page 52.

<sup>&</sup>lt;sup>58</sup> Received from Norton, Inc. by a deed granted November 2, 1960 (Grafton County Registry of Deeds book 950, page 294.

<sup>&</sup>lt;sup>59</sup> Telephone conversation with Michael Lemieux, October 2021.

<sup>&</sup>lt;sup>60</sup> The majority of exterior clapboards that were removed were short lengths of quarter-sawn spruce that were affixed with wire nails, indicating that they were not original clapboards and were installed after about 1880.

installed around the building at this time. The area between the cottage and North Shore road was regraded, and a new drystone wall was constructed between the building and road.

At present, the 35-acre property is known as the Ash Cottage and Hebron Marsh Wildlife Sanctuary.<sup>61</sup> The property includes several parcels on either side of North Shore Road and has several nature trails down through the wetlands between the cottage and Newfound Lake. The cottage itself is the site of summer programming for adults and teens between Memorial Day and Labor Day.

<sup>&</sup>lt;sup>61</sup> The Newfound Audubon Center is comprised of the Paradise Point Nature Center and Wildlife Sanctuary (which includes 43 acres with 3,000 feet of lakeshore off of North Shore Road, east of the Cockermouth River floodplain), the Ash Cottage and Hebron Marsh Wildlife Sanctuary, and the Bear Mountain Wildlife Sanctuary (73-acres of woodland off of West Shore Road (18-3), donated to the Audubon Society in 1999). The origin of the name, Ash Cottage, is unclear and has apparently been lost to history, however, it is speculated that the name may relate to an historic fire in the building as evidenced by charring of the frame of the main block and ash residue recently uncovered under the north ell.

The identification of the character-defining features of historic properties like Ash Cottage is a critical first step in planning for its future life. Before applying *The Secretary of the Interior's Standards*, it is important to understand what physical features of the building help to tell the story of its history and architectural importance. The *Standards* recognize the importance of maintaining these original features and spaces while rehabilitating the property for a compatible use and future life. Recognizing that a property may have original features throughout that are all "character defining," the *Standards* allow for the categorization of the features into **primary** and **secondary** spaces and features.

**Primary** spaces and features are those that should not be changed or removed unless they are beyond repair (at which time they should be replaced to match the old in design, color, texture and materials).

**Secondary** spaces and features are those that can be altered *when necessary* to accommodate compatible change that allows new and continued use of the property.

Further, the guidelines of the *Secretary of the Interior's Standards* state that "identification, retention, protection and repair" should be given first priority in every rehabilitation project. Interior spaces are not only defined by their finishes and features, but by the size and proportion of the rooms themselves and how they functioned in the historic use of the space. Distinctive features and finishes should be retained as much as possible in primary interior spaces, whereas extensive changes are more acceptable in the secondary interior spaces that service the primary or functional portion of the building. This does not mean that secondary spaces are insignificant or that all character-defining finishes can be removed from secondary spaces; it just means that more leeway is given for change needed to accommodate modern use in these areas.

#### SITE DESCRIPTION

Ash Cottage and garage are located at the center of what is now a wildlife sanctuary along either side of North Shore Road in Hebron. The cottage sits on 8.5 acres at 50 North Shore Road (Map 17-lot 10), along the south side of the main artery through Hebron, and just to the east of the compact rural village center. This parcel, along with a 23-acre parcel on the opposite side of North Shore Road (map 17-23), and two parcels to the east (Map 17-11 and Map 17-12), make up the Hebron Marsh Wildlife Sanctuary.

The cottage and parcel across the street are at the eastern edge of the locally-regulated Hebron Village Historic District, part of which was listed to the National Register of Historic Places in 1984. Though Ash Cottage is located within the locally-regulated historic district, the building is outside of the National Register district boundary.

The Ash Cottage parcel is bounded to the west by Cross Road, to the north by North Shore Road, to the northeast by undeveloped land associated with the Rogers Farm at 81 North Shore Road (Map 17-9) and the adjacent Charles Bean Sanctuary, to the east by additional Audubon Society land (Map 17-11 and 12), and to the south by the contemporary ca. 1800 Pierce Homestead at 61 West Shore Road (Map 17-13).



Figure 5: 2013 aerial view of Ash Cottage Site (Google Earth)showing relationship between cottage and various features

The land slopes slightly uphill around the building, and there are open fields to the northeast and southwest of the structure, and there is a beautiful view to the southeast toward the Cockermouth River floodplain and Newfound Lake (Figure 6). Though there were outbuildings associated with the building historically, as of writing there is no known information as to where they were located. There is a very small cellar-hole at the intersection of North Shore Road and Cross Roads to the west of Ash Cottage, in the midst of a small

group of trees. The size and shape of the hole suggests that the site was once a small cape of similar dimension to the original Ash Cottage building, and the 1860 County Map identifies it as the property of "U Pike" (Figure 3).



Figure 6: View southeast from Ash Cottage toward Newfound Lake

A dirt driveway to the southwest (project west) side of the building connects to a small 18'4" square garage and has adjacent parking for several vehicles (Figure 7). Additional parking for the location is along either side of North Shore Road. The garage is constructed on brick piers and has a dirt floor. The garage has a gable roof and novelty drop siding. The roof is sheathed with asphalt shingles, and there are two large sliding doors across the front of the building. These large sliding doors hang on late nineteenth-century cast-iron barn door hardware and may have been recycled from an earlier agricultural building. There is a small planting bed against the rear (south) elevation of the garage, with a picket fence at the east side and plug-split granite stone used as edging. The interior of the garage is unfinished with the light stud construction left exposed (Figure 8). The building is used as a garden shed and storage by New Hampshire Audubon.



Figure 7: Exterior of garage, facing west

Figure 8: Interior of garage

The well for Ash Cottage is located at the edge of the field to the southeast of the garage and southwest of the cottage. The artesian well was installed in 2001. A small granite enclosure made of old plug-split posts surrounds the well-head. The Ash Cottage septic system is located just beyond the south end of the south ell and there is a round man-hole cover in the lawn.

The area immediately surrounding the house is open lawn, and there is a dry-stone wall at the front of the house that was constructed between it and North Shore Road in 2018. The site landscaping is relatively sparse: there are a few small shrubs in the lawn at the front of the house, and a narrow perennial bed at the south elevation of the 1963 sunroom. In 2018, as part of the effort to address basement water issues, blue-stone drip edge was added around the building, adjacent to where the foundation was repaired.

Character-Defining Features of the Site			
Primary Features	Secondary Features	Non-Historic Features	
• Site at entrance to Hebron Village	• Driveways	• Modern stone wall (2018)	
• Proximity to open fields	• Walkways		

#### **EXTERIOR DESCRIPTION**

Ash Cottage is located just to the east of Hebron Village and faces northwest (project north), overlooking North Shore Road. The complicated single-story building is composed of several elements: an approximately 28'6" by 17' main block, with 25' by 13' 6" north ell, 10'6" by 17' east wing addition, 23' by 10' 6" south ell, 6' by 16' porch, and approximately 24'6" by 19' enclosed sun room and was constructed over at least five building campaigns (Figure 9).

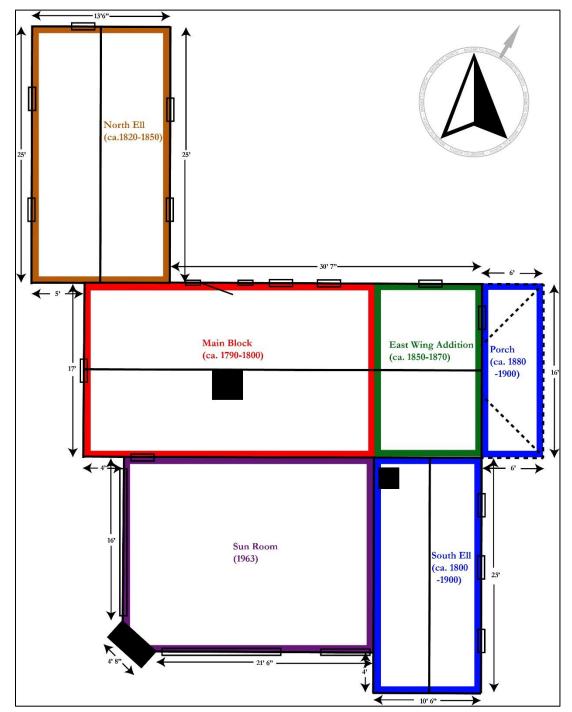


Figure 9: Sketch building plan (not to scale)

The Cottage started off as a very humble two-room center-chimney cape at the turn of the nineteenthcentury. This building is three structural bays in length and one room deep with a side-gable roof. Sometime before the Civil War, between approximately 1820 and 1850, a two-bay ell was constructed off of the northwest corner of the cottage. Several years later, between approximately 1850 and 1870 a singleroom east wing addition was constructed at the east end of the cottage. In the late nineteenth or early twentieth century a three-bay south ell was constructed off of the east wing and a porch was added, and then in 1963 the sun room was added between the south side of the main block and south ell, giving the building the present footprint.

The exterior features of the original cape (main block), east wing, and north and south ells are all quite similar. Each section of the building has a relatively steep gable roof (approximately 45 degrees) that is sheathed in wooden shingles with a plain shingle pattern. The building has close eaves throughout with a medium width flat fascia and very simple shingle molding. The clapboard siding throughout was replaced in 2018 with new cedar clapboards that were primed on both sides and affixed with modern nails. The corner boards and lower trim boards were all replaced at the same time. In 2018, a large portion of the building was jacked up, and an 8" deep, 12" wide footer was poured beneath the building and reinforced with 2 pieces of ½" rebar running the length of the footers and tied together roughly every 3'. The corners of the footings were also reinforced, and the rubble stone underpinning was replaced with modern Swenson granite.<sup>62</sup> In general, the windows throughout are late-nineteenth-century two-over two wooden sash and are approximately 26 or 27 inches wide.



Figure 10: North elevation of main block (original cape)

As stated earlier the main block faces north (Figure 10). The primary entrance to the building is through a six-panel door at what was the original center of the main block. A set of granite steps leads up to the entrance, which is framed on either side by 2/3 side-lights. The layout of the door surround and proportions

<sup>&</sup>lt;sup>62</sup> Mike Lemieux (local builder who performed the work) in conversation with author November 2021. A full frost wall was determined to be unnecessary due to the sandy substrate and rebar reinforcement.

of the elements within suggest that the building originally had a similar entrance but that the original entry was redone in the twentieth century, with some trim elements replaced as part of the 2018 renovation. The historic underpinning of the cape was largely replaced in 2018 with modern granite underpinning set on a below-grade reinforced concrete footer.

There are two two-over-two windows to the east of the entry. Each window has a mid-twentieth-century hood over it, and wide flat jambs with slightly projecting sill. The present sash are approximately 26 inches wide and likely replace original 24-inch six-over-six sash. A similar window is located at the west elevation, but lacks the mid-century hood. A single six-over-six sash is located at the west gable end of the building (Figure 11). In 2018 a single-light modern vinyl window was added to the basement to allow some natural light into the small basement room (Figure 12).



Figure 11: West gable-end window

Figure 12: Modern basement window

The south slope of the main block is pierced by a brick chimney (Figure 13). The top of the chimney is plugged with concrete. Sections of this chimney appear to have been repaired. There is lead flashing along the east and west sides of the chimney, and copper flashing at the south side, placed on top of the wood shingles.



Figure 13: Central chimney at main block, facing southeast



Figure 14: North elevation of north ell

The exterior of the north ell is very similar to that of the main block with matching two-over-two windows throughout the first floor. The western windows have hoods to match those at the north elevation of the main block.

The eaves of the north ell project slightly over the first floor. This projection creates a fully pedimented gable end at the street-side (north elevation)(Figure 14). There is a single firstfloor window at the north elevation, which is not centered. The single four-light window at the gable-end, above, is centered.

When the north ell was re-sided in ca. 2019, an historic central door was discovered at the east elevation, facing the courtyard between the ell and main house. This, combined with the size, orientation, and age of the ell have suggested that

the ell may be an early school house that was moved to the site.<sup>63</sup>

The east wing addition is also very similar to the main block with a matching roofline and eave details, matching 2018 siding, and matching 2018 granite underpinning. Like the main block, the wing addition has two-over-two windows, and the window on the north (road) side has a mid-twentieth-century hood. There is a single, slightly off-center, two-over-two window at the gable end of the building (Figure 15). A secondary exterior entrance is located at the center of the gable end, next to a two-over-two window. The door is four-panel and Greek Revival in style with a contemporary porcelain door knob. There is a screened door over the exterior door with mid-twentieth-century hardware.



Figure 15: East elevation of East Wing Addition

A late nineteenth or early twentieth-century porch extends along the west elevation of the east wing addition. The porch has a very low hip roof, supported by chamfered squared columns along the east elevation. The porch roof has plain wooden shingles. The porch deck has been recently rebuilt of modern pressure-treated boards affixed with deck screws.

The south ell also has a wood shingle roof, modern clapboard siding, and matching two-over-two windows (Figure 16). Unlike the rest of the building, this ell was constructed on wooden piers. Modern granite underpinning has been added beneath the north section of the east wall and west wall, and the rest of the ell has a lattice skirt. The area beneath the ell is accessed via a door at the south end of the ell. The west slope of the roof of the ell is pierced by a narrow brick stove chimney (Figure 17). Like the chimney of the main

<sup>&</sup>lt;sup>63</sup> Michael Lemieux in conversation with the author October 2021.

block, the top of this chimney is plugged with concrete. There are three regular windows along the east elevation of the ell. Physical evidence suggests that there were once similar windows along the west elevation that were closed up when the sun room was added in 1963. There is a single square off-center window at the south elevation of the first floor, within the bathroom (Figure 18). A large opening at the attic level has been fitted with a louvered vent.



Figure 16: East elevation of south ell

Figure 17: Chimney, south ell



Figure 18: South elevation 1963 sun room (left) and south ell (right)

Whereas all of the nineteenth-century additions to the original Crosby cottage were made to match the style and materials of the original building, the 1963 sun porch addition was designed and built to reflect the popular taste of the time and embodies many elements of the modernist international style of architecture. The enclosed porch has a nearly flat roof, sheathed with bituminous membrane. A high brick foundation creates a band around the exterior of the room, and the upper portion of the exterior walls is almost entirely

made of glass with windows banded around the south and west elevations. Built-in planters are integrated into the south elevation, beneath large plate-glass windows. There is a large fireplace at the southwest corner of the room, with large colonial-revival chimney.

Character-Defining Features of the Building's Exterior			
Primary Features	Secondary Features	Non-Historic Features	
<ul> <li>Height &amp; massing of the building &amp; additions</li> <li>Roof pitch &amp; eave detail</li> <li>Window and door locations (fenestration)</li> <li>Central brick chimney of main block</li> </ul>	<ul> <li>Historic two-over-two windows</li> <li>Mid-20<sup>th</sup> century window hoods</li> <li>Brick chimneys in additions</li> </ul>	<ul> <li>Modern granite underpinning</li> <li>Modern basement windows</li> </ul>	

#### **INTERIOR DESCRIPTION**

The interior of Ash Cottage reflects several different periods of the building's history with certain spaces and features dating to the early nineteenth-century through the present day. The interior layout and details

help tell the story of the building's evolution from a very simple and utilitarian two-room cape to a somewhat sprawling summer cottage in the twentieth-century. Despite having owned the building for a little over forty years, New Hampshire Audubon has done little to change the interior (save for some recent renovations to the north ell's bath).

#### Basement

The true basement of Ash Cottage is limited to the space beneath the west end of the original cape, beneath the original dining room and entrance hall of the two-room building and is accessed from the building's original kitchen (modern living room). The basement door dates to the original construction of the house in ca. 1800. The batten door is made of two hand-planed doors and is held shut with a cross-bolt (Figure 19). The door is suspended on fixed butt hinges that are affixed with irregularly slotted screws, as is typical of ca. 1800 (Figure 20).<sup>64</sup>



Figure 19: Ca. 1800 basement door

<sup>&</sup>lt;sup>64</sup> James L. Garvin, A Building History of Northern New England (Hanover and London: University Press of New England, 2001), 78.



Figure 20: Basement door, detail

A set of very steep stairs descends to the space, which likely originally served as a root cellar. The stairs themselves are modern, however, the location and approximate steepness is historic. There is a metal pipe hand-rail at the right-hand side of the stairs. The interior walls of the staircase are made of vertical hand-planed boards. Though only a single shelf remains at the back of the stair, ghost-marks on the wall indicate that there were once several shelves within this stair/closet space as the occupants made the best use of their limited space.

The small basement room has a dirt floor that is covered in gravel to allow for additional drainage. The walls are rubble stone with lots of pieces of

brick. The walls were initially laid dry but are now mostly mortared with different levels of skill and types of mortar by different generations of owners trying to keep water and pests out of the basement area. In one location on the north wall, a previous occupant incised the initials "CB 1960" in the wet cement.

Many of the original first floor joists were replaced in 2018 when Audubon did extensive work to the building. The new joists are all modern dimensional pressure-treated wood that are hung on joist hangers. The original sub-floor above is all manufactured with a reciprocating saw, as are the remaining framing elements. It appears that some of the sub-floor at the front of the building, adjacent to the front door has been replaced, as the floor boards are manufactured on a circular-saw and affixed with wire nails.

#### First-Floor

The living space of Ash Cottage is all confined to the first floor, which is made up of the original cape, a north ell, an east wing, a south ell, and the mid-twentieth-century sun room. The combination of successive additions on the small building has created a somewhat sprawling floor plan that includes a living room (in the original kitchen), a kitchen, dining room, sun room, two bathrooms, and two bedrooms connected by hallways (Figure 21).



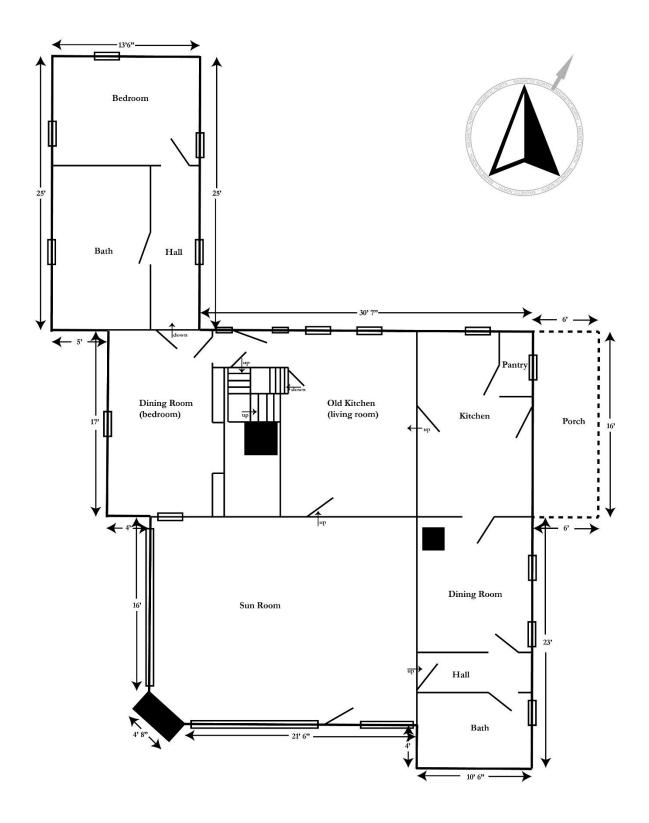


Figure 21: Ash Cottage Floor Plan (not to scale)

When it was constructed, the center-chimney cape was what is usually referred to as a hall and parlor floor plan. One walked through the front door into a small hall with the attic stairs straight ahead and a single room on either side. The partition between the hall and east room is no longer extant and was likely removed in the early twentieth-century when the Iaccaci/Norton family purchased the house, combining the two small rooms and creating a more open first-floor.

When it was constructed, the building likely had a plaster ceiling throughout the first floor. At some point this ceiling was removed to show the ceiling joists and girts. The original building frame is all hand-hewn, and some Roman numerals are visible at the ceiling joists, near the intersections with the front and back plate (Figure 22). The numerals illustrate that the frame was constructed using the "scribe rule". In "scribe rule" framing, all mortises, tenons, etc. were individually cut. The frame was constructed on the ground, with "marriage marks" (Roman numerals) incised in the framing members to specify how the frame would go back together when reassembled in a standing position. This method of framing was falling out of fashion by the 1820s and 1830s as the "square rule" was adopted.<sup>65</sup>



Figure 22: Roman numerals at ceiling joist Figure 23: Scorched joist near original hearth

Several of the ceiling joists throughout the first floor appear to have been modified at a later date. There are some signs of scorching to the frame, particularly near what would have once been the kitchen hearth, and several of the ceiling joists throughout the first floor have sections on the underside that have been filled in with new material between the tenoned portions (Figure 23).

The original **entry hall** and **old kitchen** have a painted wide-pine floor and plaster walls. The doors and windows have plain flat trim, and there is simple flat baseboard trim throughout. The area between the ceiling joists is covered with compressed fiberboard (possibly Homasote or Masonite), set in a decorative pattern with a routed edge. Though using this type of material for interior sheathing was introduced in the 1920s, the covering became very popular in the late 1930s through 1940s, and was likely installed by the Norton/Iaccaci families.<sup>66</sup>

At some point in the building's history, the front door surround was rebuilt. The original door may have been of similar proportions, but it is unclear if it had sidelight windows. The present sidelight trim and

<sup>&</sup>lt;sup>65</sup> The square rule allowed framing members to be cut *en mass* with prepared patterns used for each type of joint and everything cut to the same dimension to create a more interchangeable frame.

<sup>&</sup>lt;sup>66</sup> For more information on the history of fiberboard, please refer to Thomas C. Jester, ed., *Twentieth-Century Building Materials: History and Conservation* (Los Angeles: Getty Conservation Institute, 2014), Chapter 12: Fiberboard, 89-93.

paneling is very flat and simple, and was likely installed in the twentieth-century in an effort to restore the entrance (Figure 24).



Figure 24: Primary entrance with reconfigured trim

Figure 25: Mid-century door to sun porch

The original kitchen hearth is no longer visible in the historic kitchen (east parlor). The west wall of this room is walled over, however, some elements of the original hearth may remain *in situ* behind the wall.

The door at the south wall of the room leads down into the mid-twentieth-century sun room (Figure 25). This "Dutch" door has four raised wooden panels in the lower half and two vertical glass panels above the lock rail. The door dates to the mid-twentieth century.

The interior of the old **Dining Room**/west parlor is very similar to the east parlor and has been used recently as a bedroom (Figure 26). This room has a flat baseboard with applied molding beneath a simple chair rail. The door to the room has four raised panels, each of which has a square edge. The door is suspended on cast-iron butt hinges with a fixed pin, and has a Norfolk latch. These types of hardware were popular from about 1800 to about 1840.<sup>67</sup>

<sup>&</sup>lt;sup>67</sup> Fixed pin butt hinges were introduced in about 1800 and remained popular until about 1850 when loose pin hinges were introduced (Garvin, 81), and Norfolk latches were popular from about 1800 to about 1840 (Garvin, 82).



Figure 26: West parlor/dining room, facing northeast

As with the adjacent room, the fireplace to this parlor is no longer visible and is likely hidden behind the east wall. There are built-in nineteenth-century cabinets on either side of the fireplace location. A groove in the southern cabinet suggests that it was once used for storing dining ware, suggesting that this room was once used as a dining room (Figures 27 & 28). In the mid-twentieth-century, a built-in vanity was constructed between the cabinets, across the front of the fireplace. Lines in the floor below indicate the location of the original hearth.



Figure 27 & 28: South built-in cabinet in west parlor/original dining room, showing plate groove



Figure 29: View southeast from north ell bedroom, showing interior of ell

A batten door at the north of the west parlor leads down into the adjacent **north ell**. Like the cape, the north ell has a wood floor and plaster walls (Figure 29). The door and window trim is wide and flat, and there is a wide baseboard with applied molding throughout. The ceiling of the north ell is the same fiberboard materials as is seen in the cape, however here there is no exposed framing. The north ell consists of a long hallway and two rooms, one of which was converted into a bathroom in 1969. The doors within the ell are four-panel Greek Revival doors that are hung on loose-pin butt hinges and have porcelain knobs.

When the foundation repair was undertaken in 2019, some of the west floor boards of the bathroom were taken up, and the bathroom was partially demolished. The sink, toilet and shower surround in the bathroom are all very typical of the late 1960s, when it was added by the Iaccaci family. The hot and cold-water valves on the sink are particularly notable for their mid-century modern design (Figure 30).



Figure 30: Mid-century modern style sink, north ell



Figure 31: East wing addition/kitchen, facing north

A door at the east side of the original cape leads down into the **east wing addition**, which houses the present **kitchen** and a small **pantry** (Figure 31). The floor of this addition is covered with vinyl tile, and the ceiling is fiberboard. The walls are plaster, with vertical bead-board wainscot below a projecting chair rail. The doors throughout are typically Greek Revival in style with two short panels at the bottom and two elongated panels at the top. Each door has a porcelain knob and sits on loose-pin butt hinges. The door and window trim is wide and flat and also Greek Revival in style.

The plaster walls are covered with a very bright 1930s or 1940s wallpaper pattern with cast iron stoves and flowers. A large cast-iron sink at the north wall is also typical of ca. 1940, as is the adjacent chromed wall



Figure 32: South ell dining room, facing north

fixture with molded milk-glass shade that is adjacent to the sink. Similarly-dated towel racks and paper towel holders are also located within the kitchen.

A four-panel door at the south end of the east wing addition leads into the late nineteenth-century or early twentieth-century **south ell** (Figure 32). This ell has a wooden floor with beaded board ceiling. The walls are also sheathed in wood with a vertical board wainscot below an applied chair rail with flush horizontal boards on the wall above. As elsewhere, the door and window trim is flat.

There is a boxed stove chimney at the northwest corner of the **dining room**, and an early twentieth-century light fixture at the center of the ceiling.

A narrow hallway separates the dining room from a full **bathroom** (Figure 33). The bathroom has vinyl tile floor, vertical bead-board wainscot, and horizontal bead board walls. The bathroom retains an early twentieth-century claw-foot cast iron tub, and has a 1960s toilet. The mid-twentieth-century low-shelf-back sink is partially supported by chromed legs with a built-in towel bar on the left side. Associated towel bars and toothbrush holders date to a combination of the early and mid-twentieth centuries reflecting both the time when the bathroom was originally constructed and when it was updated by the Iaccaci family.



Figure 33: Bathroom, south ell

A door at the west end of the south ell's hall leads down into the 1963 **sun room** (Figures 34 & 35). In 1963, the Iaccaci family enclosed a patio at this location to create the sun room. This room has a urethane narrow pine floor. The interior walls are covered with the historic exterior clapboards of the cape and south ell.<sup>68</sup> The ceiling and exterior walls are unfinished on the interior: the dimensional lumber frame is visible above the windows at the exterior and the rafters and ceiling joists are visible at the ceiling. There is a large corner fireplace at the southwest corner of the room.

<sup>&</sup>lt;sup>68</sup> It should be noted that the clapboards of the south elevation of the cape are not original to the building's construction and likely represent a second generation of clapboard as they are all butted together and affixed with wire-nails, a type of fastener that did not come into prominence until after about 1880. The original clapboards would have been skived and lapped at the ends and likely affixed with hand-made nails.



Figure 34: 1963 sun porch, facing northeast (door to east parlor (living room) is at left and south ell hall at right)



Figure 35: 1963 sun porch (facing southwest)

### Attic

A door at the south side of the original cottage's entry hall opens to a set of very steep stairs that provide access to Ash Cottage's attic (Figure 36). The door is a batten door that is composed of two wide hand-planed boards. The early nineteenth-century stairs within are extremely steep with unpainted wood walls. The steps lead to a small landing and then turn at the chimney before rising to the attic level.

The attic of the building is quite interesting, as it helps illustrate the different phases of construction that create the present building. The exposed framing of the different wings and ells reflect different types of construction, and provide additional clues as to the building's story.

The original center chimney cape has a rafter and purlin roof with a square ridge pole (Figure 37). There are four structural bents, with two sets of purlins on each slope. All of the framing members are hand-hewn, as would be expected of a turn of the nineteenth-century building. Very light, hand-hewn wind braces at either interior end of the ridge pole connect down to the intersection of the upper purlin and end principal rafter. The



Figure 36: Attic stairs

original sheathing boards are all manufactured on a reciprocating water-powered saw. Both the framing timbers and sheathing boards are of very unusually light construction. Many of the gaps between the sheathing boards are covered by shingles, presumably placed there to prevent heat escaping the building and allow the attic room to be used as additional living space. Some of these shingles are loosely attached, and there are several littered along the attic floor. The shingles are hand-riven and all affixed to the underside of the roof with hand-made nails. Though hand-split shingles were marketed in New Hampshire as late as the 1860s, their use began to be overtaken by sawn shingles as early as the 1820s.<sup>69</sup> Cut nails became available on New Hampshire's seacoast by 1800 and quickly spread to inland communities as the much cheaper alternative to hand-wrought nails.<sup>70</sup> Additional hand-wrought nails are visible in the original exterior sheathing at the east end of the main block, further supporting that the building was constructed at approximately 1800 or slightly earlier.

The attic above the original cape has a full floor that is made of boards that were manufactured using a reciprocating saw. Some of the ends of the boards have Roman numerals incised in them. The attic is interrupted by the interior chimney, which is located at the south slope. The bricks of the chimney are somewhat irregular, and are all hand-pressed. Through a small hole between the floor boards one is able to peer down between the chimney and the west living room wall and see some of the void above the original kitchen hearth.

<sup>69</sup> Garvin, 29.

<sup>&</sup>lt;sup>70</sup> Garvin, 75-77.

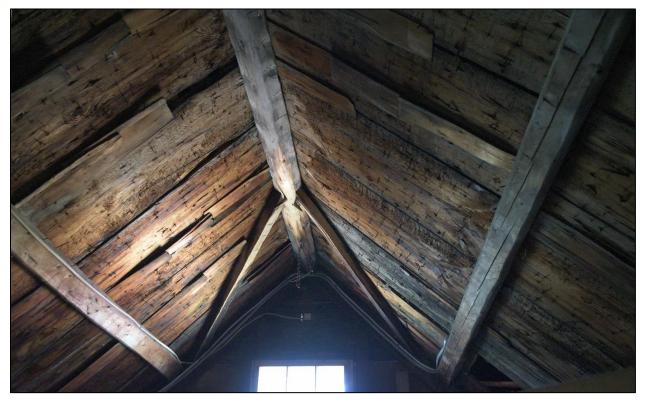


Figure 37: Attic above center chimney cape, showing roof construction (note shingles covering gaps between sheathing boards)

One of the original sheathing boards at the northwest corner of the attic has been removed, creating a small gap that allows access into the attic of the north ell. There is no floor in this section of the attic, just a single board running the length of the area. There is no insulation, and the framing is entirely exposed.

At present, the north ell has a common rafter roof (Figure 38). Originally, the roof of the north ell was very similar to that of the main block with a rafter and purlin roof with four structural bents and two purlins on each slope. The original hand-hewn rafters are still *in situ* with extremely small empty mortises for each of the purlins (Figure 39). At some point in the first half of the nineteenth-century the roof was removed and several additional rafters were added to supplement the existing structure. Many of the added rafters were left rough and only hewn flat on the upper side. Some of the smaller additional rafters were sawn on a reciprocating saw mill. The sheathing boards, now laid horizontally (they were vertical on the original rafter and purlin roof) are all manufactured on a reciprocating saw mill as well, suggesting that they were manufactured prior to about 1850 or 1860, when circular saw mills began to replace earlier mills.



Figure 38: View south from north end of north ell, toward main block



Figure 39: Empty mortises on original rafters, north ell

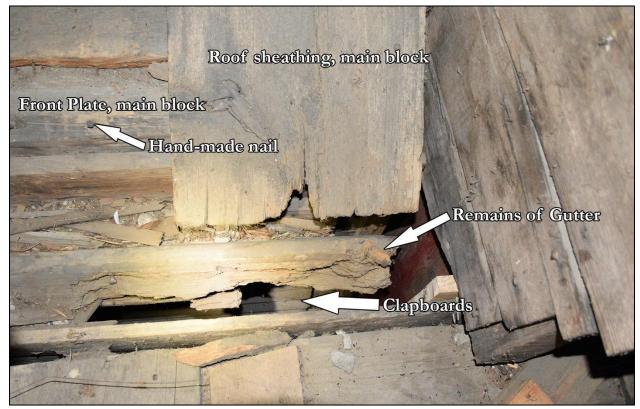


Figure 40: Gap between main block and north ell, facing south

There is a small gap in the floor between the main block and north ell (Figure 40). One can peer through this gap and see clearly that the main block and north ell have separate building frames. The wall of the main block, where the north ell intersects it, is clearly sheathed in clapboard siding that is painted a light color. In addition to this, a section of original wooden gutter is located within this small void. These pieces of evidence prove that the north ell was either constructed after the main block or moved up against the main block after the buildings were constructed.

When the east wing addition was constructed, some of the original exterior sheathing was removed from the east gable end of the main block to allow access into the attic of the addition. The attic of the east wing addition has a wood floor and was constructed with a common rafter roof (Figure 41). The framing of this addition is sawn on a reciprocating saw mill and not hand-hewn as it is in the earlier sections of the building. The roof sheathing was mostly manufactured with a reciprocating saw blade, however there are a few circular-sawn boards (possibly replacements). All of this sawn framing and sheathing is affixed with cut nails. Taken together, these technologies suggest that the wing was constructed between roughly 1840 and 1870.<sup>71</sup>

<sup>&</sup>lt;sup>71</sup> Common rafter roofs are found throughout norther New England after about 1830 (Garvin, 13), and reciprocating sawmills were in use until roughly the mid-1800s (later in some areas) when they were replaced by circular saw mills (Garvin, 19 and 27). Cut nails remained in use from approximately 1800 to about 1880.



Figure 41: East wing, facing east

The south ell represents another era in construction (Figure 42). This portion of the building has a common rafter roof. The frame is entirely "stick built" and constructed of light, circular-sawn boards. The roof sheathing is also manufactured with a circular saw, and the nails throughout are wire nails. This lighter method of framing became popular in the last quarter of the nineteenth-century, and inexpensive wire nails

were introduced during the 1880s.



*Figure 42: Light and relatively modern construction of south ell (facing south)* 

Character-Defining Features of the Building's Interior			
Primary Features	Secondary Features	Non-Historic Features	
<ul> <li>General floor-plan, especially of original cape</li> <li>Building frame</li> <li>Remaining plaster finish</li> </ul>	<ul> <li>1963 Sun Room addition</li> <li>Historic interior doors and hardware</li> <li>Window and door trim</li> <li>Bead-board walls/ceilings</li> </ul>		

Ash Cottage is in overall good to fair condition, especially for a building that is over two-hundred years in age. Though the building has been well-maintained, it does have some issues of minor deferred maintenance and deficiencies with respect to modern building codes for life-safety and accessibility.

#### SITE INSPECTION

The Ash Cottage site is in generally good condition.

- <u>Site Grading</u>: Much of the area immediately surrounding the building was graded as part of the 2018 renovation project and the ground does appear to generally slope away from the building. There is a new stone drip edge around the building, and a system of drainage installed to re-direct water away from the structure.
- Parking: At present there are only a few parking spaces on the property itself between the end of the driveway and garage. Most of the visitors to the wildlife sanctuary park along either side of North Shore Road, which has a very broad shoulder in the relatively straight and open section of road at the edge of the village. If Audubon wants to expand the programming at the space, they may want to consider adding designated handicapped spaces adjacent to the building (near the garage) and overflow parking at the field to the southwest of the cottage. As the current intended use is seasonal, and intermittent, it may be possible to use some kind of permeable surface for the overflow, creating a less formal and more environmentally-friendly parking area.
- Outbuildings: The Ash Cottage garage is in generally good to fair condition. Though the building does not seem to leak currently, the asphalt roof is beginning to peel and there is a significant amount of vegetative growth on the north slope, beneath overhanging trees (Figure 43). Some of the barn hardware on the doors is beginning to rust, and the door handle is detached and is currently on the ground. There are areas throughout the exterior of garage where the paint the (particularly the red) is peeling.



Figure 43: Garage, from northwest

#### **EXTERIOR INSPECTION**

The exterior of Ash Cottage is in generally good condition with a few locations that are in fair condition.

- <u>Exterior Wall Cladding</u>: The new (2019) exterior wall cladding of the building is in good condition. The clapboards appear to be holding paint well, and there were no noted areas of concern.
- <u>Windows</u>: The two-over two windows throughout are in fair condition. The sash does not move easily, and there are several locations with cracked panes (Figures 44 & 45). The frame of the single-light

bathroom window in the south ell is starting to come apart (Figure 46). There are also no exterior storms to protect the historic sash. The windows have never been fully restored, and are assumed to contain lead paint, as is universal for windows of this period. The window frames are in generally good condition, though they were noted to have extensive areas of paint loss throughout.



Figures 44 & 45: Typical windows showing signs of miss-alignment, cracked panes, and paint-loss



Figure 46: Damaged south window of south ell

• <u>Exterior Doors</u>: The exterior doors at Ash Cottage are in generally good condition with areas of peeling paint. The bottom rail of the front door is peeled entirely, and the threshold is rather water-logged (Figure 47). The granite steps outside this door are not quite centered, and there is a considerable void beneath the top step which may create a trip hazard. Though the paint of the screened door to the east wing addition (kitchen) is very peeled, the exterior door at this location is in good condition.

NH Audubon uses the 1963 sun room entrance as the primary entrance to the building (Figure 48). The screen and exterior doors at this entry are also in good condition, however, this entrance is also up a set of granite steps. None of the entrances to the building are barrier-free.



Figure 47: Front entrance



Figure 48: Sun room entrance (primary entrance used by NH Audubon)

• <u>Roof:</u> There are some structural concerns with the roof of the building. The roof of the original cape is extremely undersized with very thin sheathing boards. Though the steep slope of the roof has prevented any issues from snow-loading thus far, it is quite possible that a severe winter weather event may cause an issue in the future.

The nearly flat roof of the sun room is also an area of concern. In the winter, NH Audubon inserts three adjustable lally columns beneath the main carrying beams to provide additional support and strength to this roof and spread out the weight of snow. As an unheated building this has so far proved to be an effective strategy.



Figure 49: Shingle roof, north slope main block

The roof sheathing is in generally good condition. The copper flashing at the chimneys and valleys of the gable roof section appears to be well-maintained and adequate. The wood roofing shingles are in good to fair condition, with several shingles that have curled up or broken (Figure 49). The sheet material at the roof of the sun room is in fair condition and is being to show signs of UV degradation, suggesting it is nearing the end of its life (Figure 50).



Figure 50: Ash Cottage from above (north is left)

• <u>Chimneys:</u> The Ash Cottage chimneys and chimney flashing are in fair condition.

Sections of the main chimney appear to have been patched, as there are several different colors of mortar and brick visible from the exterior. There are some significantly spalled sections of the chimney below the roofline, with large sections of brick having come loose inside the attic. The chimney is "plugged" at the top with what appears to be cement, which has cracked and is growing moss along the fissures (Figure 13). The cracks and biological growth may be the result of moisture that is trapped inside the unventilated chimney. The flashing around the base does not appear to leak, however, there

is some visual damage to the flashing at the north side of the chimney.

The south ell stove chimney is in similar condition, with some mortar loss near the corbeled top and fissures developing in the concrete "plug" (Figure



Figure 52: Sun room chimney



Figure 51: South ell chimney from above

51). Like the main chimney, there is evidence of some brick spalling within the attic level.

The 1963 angled corner chimney is in fair condition (Figure 52). Several of the bricks have spalled, and there are significant areas of mortar loss near the cap. A large section of flashing at the south side has become detached, and there are signs of previous attempts to repair the flashing that have failed.

• <u>Brick Porch Walls:</u> The brick walls around the 1963 sun room are in fair condition. Several areas along the exterior of these walls appear to have white "paint" across the surface (Figure 48). The light substance is actually mortar residue left on the surface of the brick during a previous attempt to patch the mortar without properly cleaning the brick after the application of new mortar.

• <u>Fascia, Trim, Soffits & Overhangs</u>: Overall, the exterior trim at Ash Cottage is in good condition, despite some areas of peeling paint. Some of the historic trim was replaced as part of the 2019 residing project. There are a few locations, specifically at the ends of the eave trim, where there is damage to some of the ends of the boards or small pieces of wood that have become loose (Figure 53). Many of the window surrounds also have significantly peeling and flaking paint.



### **INTERIOR INSPECTION**

Figure 53: Damage to eave trim

The interior condition of Ash Cottage is generally good, with some minor condition issues throughout and some concerns relating to modern building code, especially if a portion of the building is used as a public meeting space.

- <u>Structural:</u> Ash Cottage is in apparently good structural condition overall, with some structural concerns relating to the strength of the roof. Overall, the building appears relatively plumb and solid. The roof is relatively straight and there are no known past issues with it as relates to snow-loading. It may be in NH Audubon's best interest to consider consulting with a structural engineer with historic preservation experience in the future, prior to re-roofing the building to determine if any additional support may be needed.
- Basement Walls/Foundation: The only area of Ash Cottage with a full basement is beneath the original dining room/west parlor. The mortared rubble stone walls are in generally good and stable condition. The majority of the rest of the building is held up by granite underpinning that was installed in 2018 atop a reinforced 8"x12" poured concrete base to replace the original rubble stone set on grade. The south ell is set on poured concrete piers.
- <u>Floors:</u> The hardwood floors throughout Ash Cottage are in good condition. The vinyl tile in the kitchen and bathrooms is also in good to fair condition.
- <u>Walls/Ceilings:</u> The walls and ceilings throughout Ash Cottage are a mixture of plaster and fiberboard. Generally, the walls are in good condition, however some significant cracks were observed in the plaster of the east wing addition (kitchen) (Figure 54). The nature of these cracks suggests that they may be stress cracks that were created when the foundation was repaired in 2019. The fiberboard ceilings are in good condition as well, with a few spots of staining in association with historic leaks (Figure 31).

Figure 54: Plaster cracks in east wall of east wing addition (kitchen)

As mentioned in the architectural description, there are signs that there was once a fire in the historic kitchen, near the hearth. This damage is evidenced by scorching on the ceiling joists (Figure 23) and intermittent patches in the exposed first-floor framing (Figure 22).<sup>72</sup>

- <u>Trim:</u> Interior trim throughout was found to be in good condition.
- <u>Insulation:</u> There is no known insulation in Ash Cottage. Although there may be very minimal insulation in the walls of the building, no insulation was observed at the attic level.<sup>73</sup> The building has no storm windows, nor is there any weather stripping at the doors. Since at least the 1930s, the use of the building has been seasonal, and there is also no heating system in the cottage. The only useable heat source is the corner fireplace in the sun room. Since the building is currently only used seasonally and has no heating system, insulation of the structure is not necessary.
- <u>Life-Safety and Code:</u> The is no barrier free access to Ash Cottage, and every entrance is two steps above grade. The interior spaces are also at different levels, with each addition constructed at a slightly different level. Though both bathrooms are spacious enough to accommodate current code, neither has any grab-bars nor compliant fixtures. If NH Audubon wants to use part or all of the building for public events, it will be necessary to have a compliant restroom.

<sup>&</sup>lt;sup>72</sup> According to local carpenter, Michael Lemieux, additional ash deposits were found on the ground underneath the north ell when excavating in 2019, suggesting that the fire may have been more wide-spread and *possibly* giving a clue as to the origin of the name Ash Cottage.

<sup>&</sup>lt;sup>73</sup> No insulation was found anywhere in the building during the 2018-19 renovation project. This is not unusual for a building of this vintage that was used as a seasonal dwelling in the 20<sup>th</sup> century.

### BRIEF DESCRIPTION AND EVALUATION OF MEP SYSTEMS

The MEP systems of Ash Cottage are in fair to poor condition.

- <u>Heating & Cooling:</u> There is no heating nor cooling system in Ash Cottage. The building has not been used year-round since the nineteenth-century, and never appears to have had any central heating. Originally, the structure was heated by two fireplaces in the main block, and a cook/parlor stove in the south ell.
- <u>Ventilation</u>: The only mechanical ventilation in the building is a large fan in the attic of the south ell. The date of this fan is unknown, and it is currently unused.
- <u>Electrical</u>: At the time of the site-visit, the electricity to Ash Cottage was shut off. The electrical service to the building is fed overhead from a pole near the garage. Though the old circuit-breaker electrical panel in the basement was recently replaced with a new panel, the majority of the interior wiring has yet to be transferred over to the new panel and the new panel was not switched on due to the proximity to the building's water circulation tank (Figure 55).



Figure 55: Electrical panels, west basement wall

Most of the wiring throughout the building has been updated relatively recently with modern insulated wiring ("Romex"). There are still a few circuits with mid-twentieth-century woven wire. The building has no emergency generator and there is no emergency lighting.

• <u>Plumbing:</u> The plumbing systems of Ash Cottage is in fair to poor condition and is also currently shut off. The 1969 bathroom in the north ell is no longer functioning, and the water to this part of the building is no longer hooked up (new PEX pipe was run beneath the north ell in 2019, but was

not connected at either end). Uninsulated copper pipes run from the basement room to feed the kitchen and south ell bathroom. The 2001 artesian well is located to the south of the building, and the septic tank is located to the southeast (Figure 5). The type and age of the septic system is unknown as of writing, and should be further investigated for age, condition, design, and functionality, especially if the Cottage use increases beyond seasonal employee housing.

• <u>Fire-Protection</u>: There are some scattered household fire alarms throughout Ash Cottage, but there is no full fire-protection system for the building. The small battery-operated detectors are older models and it is unclear if they are in working order.

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It is recommended that all work to Ash Cottage be undertaken in accordance with the *Secretary of the Interior's Standards for Rehabilitation* (Appendix A). There are four different treatment approaches under the guidelines of the Secretary of the Interior: Preservation, Rehabilitation, Restoration, and Reconstruction. Because the building evolved over time, the *Standards for Rehabilitation* are the most appropriate guidelines to use for the building. These *Standards* acknowledge the need to alter and add to historic properties to meeting continuing or changing use while maintaining the property's historic character.

As the Ash Cottage was listed in the New Hampshire State Register of Historic Places in 2020, the building is defined as "historic" in relation to modern building codes. For instance, the Americans with Disabilities Act (ADA) explicitly includes particular and more flexible allowances for historic properties, so that modifications do not "threaten or destroy" architecturally and historically significant building elements. Further, the 2015 International Existing Building Code (effective in NH as of Sept. 2019), and NH State Fire Code NFPA 909, explicitly grant variances for historic structures.

As of writing, New Hampshire Audubon does not anticipate any major changes in use for the building. The organization would like to continue using the cottage as seasonal staff housing and for small summer programming and have no desire to make the building suitable for year-round occupancy. The organization has a large staff influx over the summer months, and experiences a lot of difficulty finding affordable seasonal housing for their Paradise Point staff. Ash Cottage has been unused for several years and returning the building to use could help alleviate some of the housing shortage. Another long-term use that has been considered is utilizing the building as seasonal housing for an artist in residence program or live-in caretaker and using the sun room as a classroom space.

The recommendations listed in this Historic Building Assessment provide a list of needed building improvements in an effort to physically secure the existing building and refurbish the character-defining features while also adapting the structure to comply with the appropriate modern building codes. The recommendations are made in a suggested phased approach according to the immediacy of the condition issues and programmatic needs of NH Audubon. As funding becomes available, Audubon will want to create more detailed architectural and engineering drawings and specifications for each item, based on National Park Service recommendations. It is recommended that the organization consult with the NH Division of Historical Resources and New Hampshire Land and Community Heritage Investment Program (if utilizing grant funding) prior to beginning any construction.

The building renovations can easily be broken down into short, mid, and long-range priorities to create more manageable projects. As with any historic building, the greatest priority should be given to keep water out of the building and prevent further decay and making sure that the building is structurally-sound. Once the building is safe and secure, efforts can focus on building maintenance and compliance with life-safety codes. The division of recommendations into short, mid, and long-range recommendations is made as a general guideline with things relating to securing the building listed as high priority, the mid-range recommendations focused on increasing current functionality, and the long-range recommendations devoted to long-term planning and more aesthetic issues.

SH	ORT-RANGE RECOMMENDATIONS: RETURNING BUILDING TO ACTIVE USE	ANTICIPATEI
		Cost
ι.	Improve Site Drainage – Improve drainage around north elevation of main	\$2,00
	block by slightly regrading to slope grade away from building and improve on	
	2018-19 drainage work. Add stone along drip line on top of re-graded surface	
	adjacent to north sill to prevent splash-back against building.	
2.	<b>Reconfigure Utility Room/Basement to Electrical Code Concerns</b> – Ash	\$75
	Cottage's electric and water services are currently shut off as the building	
	water and electrical systems are too closely located to be legally operational	
	(the minimum proximity is 3'). In order to return the building to use, it is	
	recommended that the water circulation tank and associated piping be	
	relocated from the center of the west wall to the south side of the west wall.	
<b>.</b>	<b>Increase Accessibility</b> – Currently, there is no universally accessible entry or	
	bathroom in Ash Cottage, limiting Audubon's ability to utilize the space for	
	public events. In order for New Hampshire Audubon to use the building for	
	public programming, they must supply a barrier-free entry and restroom.	
	Since Ash Cottage is included on the NH State Register of Historic Places, it	
	qualifies as an historic structure, and is, therefore, subject to the International	
	Building Code for Existing Buildings, which grants some variance from	
	accessibility code. In order to do this, it may be possible to install an exterior	
	ramp across the south side of the building to the sun room door. Audubon may	
	consider reconfiguring the step up into the hallway and restroom in the south	
	ell, and reconfiguring the south ell's bathroom to create a unisex accessible	
	restroom that is closely related to the public meeting room. Ensure that all	
	work is done in accordance with National Park Service <i>Preservation Brief 32</i> .	
	-	
	Making Historic Properties Accessible.	\$3,50
	a. Add ramp to sun room entry and from sun room through hall to	<i>\$</i> 3,30
	b. Reconfigure barrier-free restroom	\$4,00
•	Slightly modify interior to create more usable staff housing – While	\$2,00
	creating more accessible public space in the sun room and south ell, it may be	
	beneficial for NH Audubon to slightly reconfigure rest of the building to create	
	private and secure staff housing. Currently, though the building has two staff	
	bedrooms, one bedroom and bathroom are only accessible by walking through	
	the other bedroom. Installing a removable partition with door across the north	
	section of the west parlor of the cape (historic dining room) will create a	
	hallway between the old kitchen (living room) and north ell that could be easily	
	removed should the room use change in the future. This would create two	
	private bedrooms on either side of a shared bath for staff.	

Plumbing Updates – The semi-demolished bathroom of the north ell should be	\$6,500
reconfigured to create a shared bathroom for summer staff that is separated from	
the public restroom at the south end of the south ell.	
Update Kitchen – In order to make the Ash Cottage more comfortable for	\$6,000
summer staff, it is recommended that the historic kitchen be upgraded with a	
new stove, refrigerator, counters and cabinets to augment the historic cabinets	
under the historic sink.	
Plaster Repair – Remaining historic plaster surfaces throughout the building	\$5,000
should be repaired as economics allow. Repairs to be done by a contractor	
with experience with historic plaster and in accordance with National Park	
Service Preservation Brief 21: Repairing Historic Flat Plaster.	
Electrical Upgrades – Though some electrical upgrades have been made, not	\$3,500
all of the historic wiring was replaced. To create a safe environment, it is	
recommended that all remaining historic woven-wire be replaced with modern	
electrical wiring by an electrician with experience in historic building, utilizing	
historic wiring locations to as great an extent as is practicable to minimize new	
holes in the historic building fabric. In order to retain historic character, re-use	
and re-wire existing fixtures to as great an extent as is practicable.	
otal Short-Range Recommendations	\$33,250
	<ul> <li>the public restroom at the south end of the south ell.</li> <li>Update Kitchen – In order to make the Ash Cottage more comfortable for summer staff, it is recommended that the historic kitchen be upgraded with a new stove, refrigerator, counters and cabinets to augment the historic cabinets under the historic sink.</li> <li>Plaster Repair – Remaining historic plaster surfaces throughout the building should be repaired as economics allow. Repairs to be done by a contractor with experience with historic plaster and in accordance with National Park Service <i>Preservation Brief 21: Repairing Historic Flat Plaster.</i></li> <li>Electrical Upgrades – Though some electrical upgrades have been made, not all of the historic wiring was replaced. To create a safe environment, it is recommended that all remaining historic woven-wire be replaced with modern electrical wiring by an electrician with experience in historic building, utilizing historic wiring locations to as great an extent as is practicable to minimize new holes in the historic building fabric. In order to retain historic character, re-use</li> </ul>

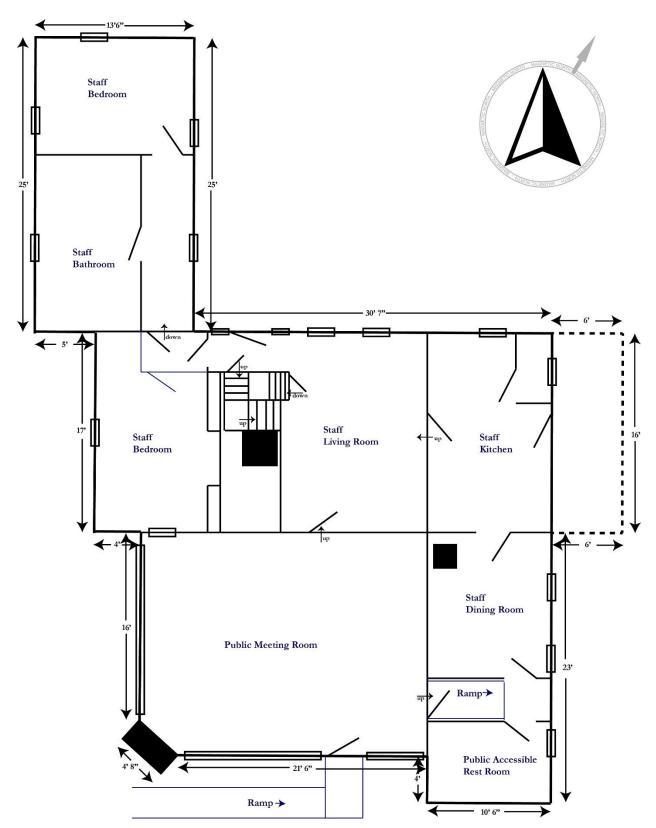


Figure 56: Conceptual plan showing slight reconfiguration of space (not to scale)

MID-RANGE RECOMMENDATIONS: RESTORING THE BUILDING ENVELOPE	ANTICIPATED
	Cost
9. Replace Wood Shingle Roof – Remove existing roofing down to sheathing	\$69,600
repair any broken or damaged boarding with similar material.	
a. Re-roof in-kind with cedar shakes to match the existing in terms of	
design, color, texture, and materials. Price is based on the current	
material price of \$696/square for red cedar	
b. Add a second layer of boards or plywood on top of the historic	
sheathing boards of main block to provide additional strength, then re-	
roof above in-kind to match the existing.	
c. Replace membrane roof in-kind	
All work is to be in accordance with National Park Service Preservation Brief	
4: Roofing for Historic Buildings.	
<b>10. Properly Ventilate Blocked Chimneys</b> – Though the historic center chimney	\$1,000
and kitchen/south ell chimney are currently capped, the existing cap system	
does not allow the chimneys to ventilate properly and may trap moisture inside	
the flues, leading to further degradation of brick and potential future problems.	
11. Repair Sun Room Chimney – Employ a mason with experience in working	\$4,000
with historic buildings to repair the ca. 1963 sun porch chimney. Carefully	
remove the spalled brick, then repair as necessary matching historic brick as	
closely as possible. Repoint all damaged mortar joints, matching the existing	
mortar as closely as possible in terms of color and finish. All work to be	
performed in accordance with National Park Service Preservation Brief 2:	
Repointing Mortar Joints in Historic Buildings.	
12. Exterior Trim Repair – Inspect the exterior Ash Cottage trim for rot,	\$7,500
excessive paint cracking resulting in exposed wood surfaces, and areas of	
crazing. In some instances, it may be possible to repair split or otherwise	
damaged clapboards with products such as PC Products Rot Terminator and PC	
Woody epoxy. Where rot is found, replacement shall be kept to a minimum,	
and all replacement shall match the existing material in terms of texture,	
dimensions, and design. Replacement clapboards should be extra-clear quarter-	
sawn spruce or cedar (not pine) with a hard edge and matched to the taper of	
the original siding with all joints to match the existing. New fasteners shall	
match the original and be galvanized or stainless if possible.	

<b>13. Exterior Painting</b> – Once all exterior trim is repaired, all exterior surfaces shall	\$20,000
then be completely cleaned of all dirt and grime, and any loose paint shall be	
removed by lightly scraping and hand sanding. Where required, additional	
sanding by mechanical means may occur, in the most sensitive fashion to	
remove unstable paint. The use of pressure-washing is NOT recommended in	
historic buildings. Once surfaces are prepared, spot prime with an oil-based	
primer, followed by two coats of high-quality latex paint to encapsulate any	
remaining lead paint.	
All work is to be performed in accordance with the National Park Service	
Preservation Brief 10: Exterior Paint Problems on Historic Woodwork,	
Preservation Brief 37: Appropriate Methods for Reducing Lead-Paint Hazards	
in Historic Housing and following appropriate lead-safety protocols.	
14. Repair Historic Windows – Repair 14 two-over-two windows (\$1,200/ea,),	\$18,000
one six-light sash, one four-light sash, and one single-light historic window	
sash throughout the building as needed, securely reinstalling the sash in their	
historic locations. Each window shall be stripped of all paint to not only	
remove flaking paint but also removed all lead paint from the surfacing, making	
the windows safe to use. Window sash shall be re-glazed, primed, and painted	
with two coats of finish paint on both sides to match the existing. All work to	
be performed in accordance with the National Park Service <i>Preservation Brief</i>	
9: The Repair of Historic Wood Windows.	
Total Mid-Range Recommendations	\$120,100

LONG-RANGE RECOMMENDATIONS: REPAIR THE HISTORIC GARAGE	ANTICIPATED Cost
<b>15. Replace Garage Roof</b> – Remove existing roofing down to sheathing and repair	\$5,000
any broken or damaged boarding with similar material. Then, re-roof in-kind	
with three-tab asphalt shingles to match the existing in terms of color, design,	
texture, and materials.	
<b>16.</b> Pour Slab Floor – In order to increase the usability of the garage for storage,	\$3,000
it may be advantageous to pour a slab floor inside of the existing piers. Prepare	
the site by cleaning out the garage, leveling the gravel floor and create a barrier	
to pressure-treated wood between the piers to hold the concrete in place at the	
edges prior to pouring the slab.	
17. Restore Sliding Doors & Garage Trim - Inspect the Garage doors and trim	\$1,500
for rot, excessive paint cracking resulting in exposed wood surfaces, and areas	
of crazing. In some instances, it may be possible to repair split or otherwise	
damaged clapboards with products such as PC Products Rot Terminator and PC	
Woody epoxy. Where rot is found, replacement shall be kept to a minimum,	
and all replacement shall match the existing material in terms of texture,	
dimensions, and design. New fasteners shall match the original and be	
galvanized or stainless if possible	
<b>18. Re-Paint Garage</b> – Once garage exterior is repaired, all exterior surfaces shall	\$5,000
then be completely cleaned of all dirt and grime, and any loose paint shall be	
removed by lightly scraping and hand sanding. Where required, additional	
sanding by mechanical means may occur, in the most sensitive fashion to	
remove unstable paint. The use of pressure-washing is NOT recommended in	
historic buildings. Once surfaces are prepared, spot prime with an oil-based	
primer, followed by two coats of high-quality latex paint to encapsulate any	
remaining lead paint.	
All work is to be performed in accordance with the National Park Service	
Preservation Brief 10: Exterior Paint Problems on Historic Woodwork,	
Preservation Brief 37: Appropriate Methods for Reducing Lead-Paint	
Hazards in Historic Housing and following appropriate lead-safety protocols.	
Total Long-Range Recommendations	\$14,500

SUMMARY OF COSTS: SHORT-RANGE RECOMMENDATIONS (AS SOON AS POSSIBLE)	ANTICIPATED COST
1. Improve site drainage	\$2,000
<ol> <li>Reconfigure Utility Room/Basement</li> </ol>	\$750
3. Increase Accessibility	\$7,500
4. Slightly Modify Interior to Create Staff Space	\$2,000
5. Plumbing Updates	\$6,500
6. Update Kitchen	\$6,000
7. Plaster Repair	\$5,000
8. Electrical Upgrades	\$3,500
Total Short-Range Recommendations	\$33,250
MID-RANGE RECOMMENDATIONS (1-5 YEARS)	ANTICIPATED COST
9. Replace Wood Shingle Roof	\$69,600
10. Properly Ventilate Blocked Chimneys	\$1,000
11. Repair Sun Room Chimney	\$4,000
<b>12.</b> Exterior Trim Repair	\$7,500
<b>13.</b> Exterior Painting	\$20,000
14. Repair Historic Windows	\$18,000
Total Mid-Range Recommendations	\$120,100
LONG-RANGE RECOMMENDATIONS (GARAGE REPAIRS)	ANTICIPATED COST
15. Replace Garage Roof	\$5,000
16. Pour Slab Floor	\$3,000
17. Restore Garage Doors & Trim	\$1,500
18. Re-paint Garage	\$5,000
Total Long-Range Recommendations	\$14,500
Project Subtotal	\$167,850
Contingency (+10%)	\$16,785
Management Fee/General Conditions (+10%)	\$16,785
Total Project Construction Cost	\$201,420

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Williams, Mae and Marc Nutter. "New Hampshire Division of Historical Resources Individual Inventory Form – Ash Cottage (HEB0054)." 2018, updated 2020. On file with the NH Division of Historical Resources, Concord, NH.

# **Appendices/Supplemental Information**

The following appendices have been assembled as supplementary information to accompany the Ash Cottage Historic Building Assessment. The information is added for any reader who wishes to read further into reports and discussion points raised by this report, and for use in creating finalized plans for implementing the recommendations. This report aims to create a general list of recommendations for future work on the building, to be further explored as funding becomes available. Because the report does not include Specifications for the future work, the information from appropriate National Park Service guiding documents has been included here for use in helping to create the Architectural & Engineering Specifications ahead of specific construction projects.

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### **Appendix A: Secretary of the Interior's Standards**

#### The Secretary of the Interior's Standards for the Treatment of Historic Properties

National Park Service, U.S. Department of the Interior

The Standards are a series of concepts about maintaining, repairing, and replacing historic materials, as well as designing new additions or making alterations. They provide practical guidance for decision-making about work or changes to a historic property. Applicants to the Land and Community Heritage Investment Program (LCHIP) and some other preservation grant programs must be willing to adhere to these Standards. The Standards are to be applied to specific rehabilitation projects in a reasonable manner, taking into consideration economic and technical feasibility. Of the four treatment approaches, the Standards for Rehabilitation apply to most buildings in current use.

#### **Standards for Rehabilitation**

- 1. A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces and spatial relationships.
- 2. The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces and spatial relationships that characterize a property will be avoided.
- 3. Each property will be recognized as a physical record of its time, place and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken.
- 4. Changes to a property that have acquired historic significance in their own right will be retained and preserved.
- 5. Distinctive materials, features, finishes and construction techniques or examples of craftsmanship that characterize a property will be preserved.
- 6. Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.
- 7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.
- 8. Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.
- 9. New additions, exterior alterations or related new construction will not destroy historic materials, features and spatial relationships that characterize the property. The new work will be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.
- 10. New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

More on the Standards and associated Guidelines, which offer general design and technical recommendations to assist in applying the Standards, can be found at:

https://www.nps.gov/tps/standards.htm. Together, the Standards and Guidelines provide guidance and a framework for decision-making about work or changes to an historic property.

### **Appendix B: Ash Cottage Determination of Eligibility**

New Hampshire Division of Historical ResourcesDetermination of Eligibility (DOE)Inventory #: HEB0054					
DOE Review Date: 5/13/2020	Date Receiv	Date Received: 4/16/2020		DOE Approved: Yes	
Property Name: Ash Co Area: Address: 50 North Shore Road Town: Hebron County: Grafton	ottage				
Reviewed For: SR		<b>DOE Program</b> ( State Register	s):		
Determination of Eligibility:					
Not evaluated for individual el State Register eligible, individu	•	Integrity: Yes	L	Level: Local	
Criteria: A: Yes	B: No	C: Yes	D: No	E: No	
Areas of Significance(s): Period of Significance: 1800 to 19 Architecture Entertainment / Recreation				nificance: 1800 to 1970	

#### Boundary:

Tax parcel 17-10

#### Statement of Significance:

May 2020 Update: The Ash Cottage was reviewed for State Register eligibility and found to be eligible for its association with the common rural NH trends of farmsteads converting to summer house use in the late 19th and early 20th century. The property is a good example of a vernacular New England farmhouse, turned summer home. Since 1979 the property has been used by NH Audubon for educational programming and events, which is also an important context.

#### Comments:

This form is a nice use and outgrowth of the 2018 community planning survey.

### Follow Up:

Notify appropriate parties

# Appendix C: Weblinks for Preservation Briefs Mentioned in IV: Recommendations

The following National Park Service Preservation Briefs were referenced in the IV-Recommendations section of this report. To find these reports in full, please refer to the website links below:

Preservation Brief 2: Repointing Mortar Joints in Historic Buildings, by Robert C. Mack, FAIA and John P. Speweik, 1998: https://www.nps.gov/tps/how-to-preserve/briefs/2-repoint-mortar-joints.htm

Preservation Brief 4: Roofing for Historic Buildings, by Sarah M. Sweester, 1978: https://www.nps.gov/tps/how-to-preserve/briefs/4-roofing.htm

Preservation Brief 9: The Repair of Historic Wooden Windows, by John H. Myers, 1981: https://www.nps.gov/tps/how-to-preserve/briefs/9-wooden-windows.htm

Preservation Brief 10: Exterior Paint Problems on Historic Woodwork, by Kay D. Weeks and David W. Look, AIA, 1982: https://www.nps.gov/tps/how-to-preserve/briefs/10-paint-problems.htm

Preservation Brief 21: Repairing Historic Flat Plaster – Walls and Ceilings, by Marylee MacDonald, 1989: <u>https://www.nps.gov/tps/how-to-preserve/briefs/21-flat-plaster.htm</u>

Preservation Brief 32: Making Historic Properties Accessible, by Thomas C. Jester and Sharon C. Park, AIA, 1993: <u>https://www.nps.gov/tps/how-to-preserve/briefs/32-accessibility.htm</u>

Preservation Brief 37: Appropriate Methods for Reducing Lead-Paint Hazards in Historic Housing, by Sharon C. Park, FAIA, and Douglas C. Hicks, 1995 [updated 2006]: <u>https://www.nps.gov/tps/how-to-preserve/briefs/37-lead-paint-hazards.htm</u>