

Cedar's Silver Lining: Historic Campbell House



Campbell House Reroof completion, November 2016. Photo courtesy of Northwest Museum of Arts & Culture

SPOKANE, WASHINGTON

CASE STUDY: February 2017

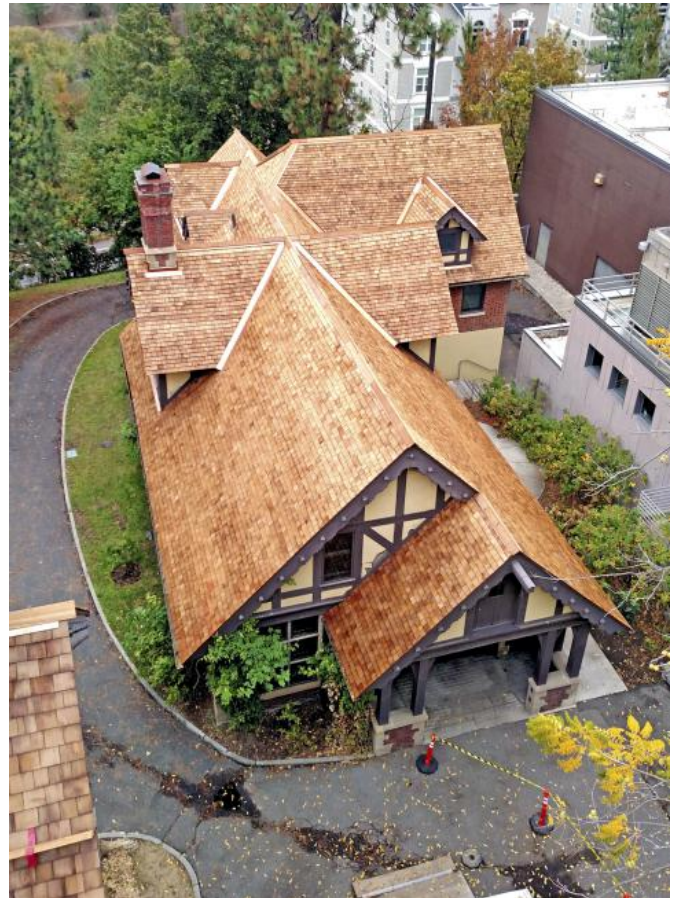
At the end of a majestic tree-lined residential street in Spokane, Washington, stands Campbell House: a mining magnate's family home, a mansion that does justice to the beauty of **Certigrade® cedar shingles**. This historic home and accompanying carriage house are listed on the US National Register of Historic Places, owned by the State of Washington, and operated by the **Eastern Washington State Historical Society** ("EWSHS"). Both buildings were reroofed in the summer of 2016. The **Cedar Shake and Shingle Bureau** ("CSSB") was part of the project right from the start.

A Mining Fortune is Created

Family patriarch **Amasa Campbell** made his fortune in the late 1890s by owning a string of successful mines in the Wallace, Idaho area. In 1891, partners **John Finch** and **Amasa Campbell** joined with others to incorporate Hecla Mining Company in a canyon near Wallace, Idaho. The mine still operates today, producing silver, lead, zinc and gold (www.hecla-mining.com/history/).



Amasa Campbell, oil on canvas, 1904. Painted from life by W. Thomas Smith, Chelsea Arts Club, London, England. Photo courtesy of: Northwest Museum of Arts & Culture/EWSHS, [2485.1].



Carriage House with new roof, October 2016. Photo courtesy of BCI.



Helen and Amasa Campbell, c. 1897. Photo courtesy of: Northwest Museum of Arts & Culture/EWSHS, [L-86-287].

Wallace was a tough town, having been under martial law twice during its history, in 1892 and 1899. The labor history of Wallace

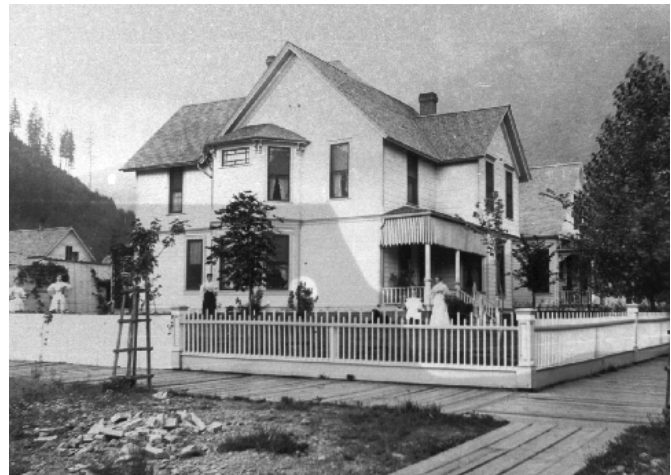
is of interest: "...It is worthy of note that the notorious [Industrial] Workers of the World (the "Wobblies") regarded the miners of Northern Idaho as far too radical." (Images of America: **The Silver Valley**, Historic Wallace Preservation Society, Arcadia Publishing, 2010, p121). The Wobblies mentioned herein are of the same group that took part in the Everett Massacre of 1916 involving the forest industry's own cedar Shingle Weavers! Deeply immersed in an industry well-known for claim jumping, mule power, and singing canaries, mining family residents of Wallace were both tough and crafty. In the 1960s, when the United States and Idaho Departments of Transportation wanted to locate Interstate 90 right through the middle of town, the ladies of the town banded together and had the entire town listed on the US National Register of Historic Places, thus saving Wallace's history and buildings from destruction.

Campbell's wealth came from hard rock silver and lead mines in Wallace. Being a mine owner in the silver capital of the world had its perks. In 1898, **Campbell's** success allowed him to build his mansion in Spokane, about 80 miles from Wallace. In the late 1890s, Spokane was an up and coming city, a regional trade center for the burgeoning timber, mining, agricultural and railroad industries. The stock exchange was located in Spokane, and it was a much more cultured, urban area than the rough and tumble towns where the mines were located. Amasa Campbell's wife, **Grace**, was a steady companion at his side in elegant society; their only child **Helen** was born in 1892.

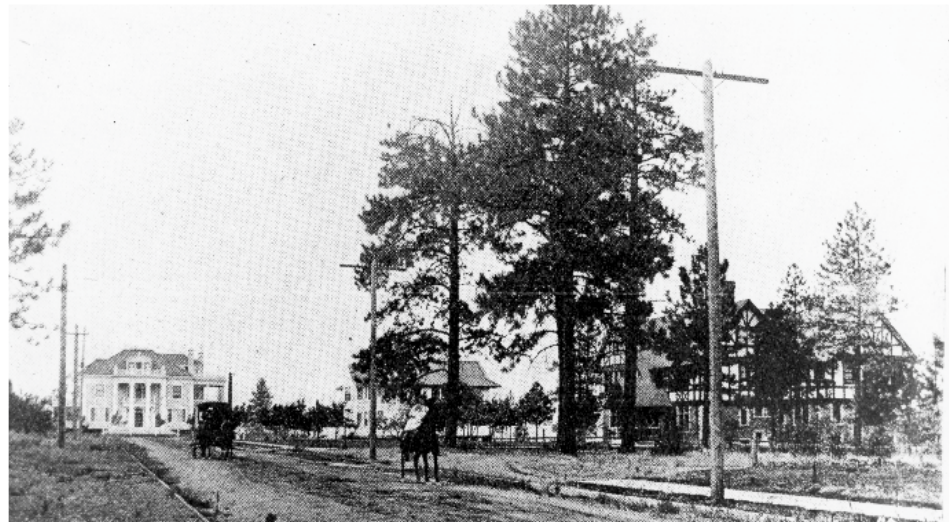
The clashes of mine labor and owners, along with Spokane's educational and cultural opportunities, are



The famed mining company that helped create part of the Campbell Family fortune. Photo courtesy of: Northwest Museum of Arts & Culture/EWSHS, Hecla stock certificate.



Campbell home in Wallace, Idaho, c. 1890-1898. Photo courtesy of: Northwest Museum of Arts & Culture/EWSHS, [L90-153].



First Avenue Looking West, image from a 1900 railway pamphlet (Campbell House on right). Photo courtesy of: Northwest Museum of Arts & Culture/EWSHS, [L2004-32.987].

perhaps the reasons why **Campbell** moved his beloved family there. Still, ties to Wallace remained strong; several cousins lived there, and the **Campbells** often spent Christmas with them.

The Certigrade® Cedar Shingle Reroofing Project

The last time that the Tudor Revival-style Campbell House and its carriage house had been reroofed was in 1991. A 2015 roof assessment report, written by **BOLA Architecture + Planning** of Seattle, WA, recommended replacement with **16" Fivex Certigrade® cedar shingles** to match the existing size and exposure. After examining the roof via scissor lift, it was noted that debris had built up in keyways and at the first course, reducing the lifespan of the roofs. Observations from the attic spaces revealed solid board sheathing on the main house, and skip sheathing on the carriage house, with insulation in the rafter spaces. Both structures needed better ventilation systems to improve air flow. **Matt Hamel, AIA, LEED AP BD+C, Associate with BOLA Architecture + Planning ("BOLA")**, noted that the firm's recommendations "tried to keep as close to the historic details and configurations as possible." **Hamel** contacted **Tony Bonura**, CSSB District Manager, Northeast, for technical assistance with this project. The CSSB's New Roof Construction Manual was also consulted as a useful guide.

Washington State Capital funding allowed for this project to move forward. After a formal public bid process, **Burton Construction, Inc. ("BCI")** of Spokane was selected as the General Contractor and **All Surface Roofing & Waterproofing, Inc.**, also of Spokane, as the Roofing Contractor. The main house required 85 squares and the carriage house needed 60 squares of product. **CSSB Member-produced fire-retardant Class C treated Certigrade® Shingles** were specified and installed. The project also included continuous fire-retardant treated 1x6 ridge boards as opposed to pre-fabricated ridge material. Given the listing on the historic register, and diligent restoration efforts to date, **Marsha Rooney, Senior Curator of History, Northwest Museum of Arts & Culture** in Spokane, notes that "... only cedar would fully realize the gem we have."

The existing roofs had two distinct substrate systems: solid sheathing with roofing felt at the main house, and skip sheathing with no felt at the carriage house, which resulted in more deterioration and cupping on the unvented main house. The 2016 reroof project incorporated a non-permeable membrane protection at the eaves, valleys, rakes and sidewalls. Specifications also called for 30lb felt underlayment with ASTM D226 type II specification. **Cedar Breather®** continuous ventilation product and **Ridge Vent®** materials were installed for ventilation purposes. Double coated copper flashings were used



As-found shingle condition. Note lifting of shingles caused by lack of adequate ventilation. November 2014. Photo courtesy of BOLA.

Carriage House as-found condition, November 2014, with ca. 1992 roof. Photo courtesy of BOLA.

throughout, making for an elegant finishing touch at the multitude of dormer valleys, ridges, and chimney flashings. Wider valleys were specified for the 1991 and 2016 reroofing jobs, as the 1898 valley widths were only 2 inches on either side, making for debris clogging conditions. Other specially-made copper flashing components and fully-soldered joints were critical to the finished work. Type 316 stainless steel fasteners were used throughout.



Carriage House ridge cap with mitered, open joint and rusting flashing, November 2014. Photo courtesy of BOLA.



Valley with copper flashing and tree debris, November 2014. Photo courtesy of BOLA.

It's In the Details

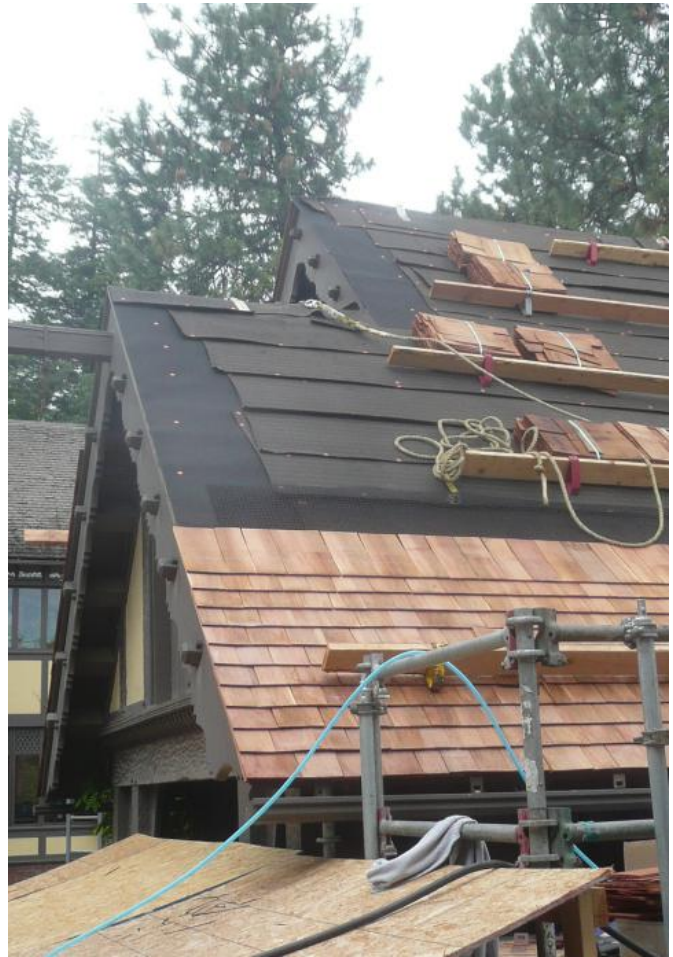
The existing ridge cap boards were thin, with short nails, and detailed with a mitered joint on the Carriage House, which were open at various places. The ridges also had rusting cap flashing, which projected about an inch below the ridge boards. An improved detail was developed with slightly thicker, fire-retardant treated material, a lap joint, longer nails to penetrate the sheathing, copper flashing, and **Rapid Ridge®** ridge vent.

Cedar Breather® was used to minimize physical and visual impact to existing historic materials and relationships, such as base trim at dormers and side walls.

Fully soldered copper crickets were installed at chimneys with long-lasting silicone sealant at reglets, and all the copper was coated with two coats of clear acrylic to prevent corrosion.

Environmentally Responsible Certi-label™ Roofing

An added bonus for the project, and the industry as a whole, is that much of cedar shake and shingle fiber supply comes from salvage wood that would otherwise be left on the forest floor. Environmentally renewable, wood roofs don't deplete earth's resources like other materials mined or pumped from the ground; the industry replants and trees regrow for future generations. The museum expects a good 30 year life from its new roofs. Historic trim is maintained in a sustainable fashion, embodying and recouping energy when replacement isn't necessary. The sustainability of the roofs is seen in their longevity and durability. As **Hamel** stated, "...you don't put something back to fail."



*Carriage House with 5" exposure shingles, July 2016.
Photo courtesy of BOLA.*



*Detail of improved ridge cap. September 2016.
Photo courtesy of BOLA.*



Work included restoring, re-leveling, and re-aligning the drip line of the existing custom shaped and custom hung gutters and downspouts. September 2016. Photo courtesy of BOLA.

Job Site Challenges

The reroofing job began in June 2016. **Darrell Kidwell, VP with All Surface Roofing & Waterproofing, Inc.**, noted that "... as is typical with old buildings, there were some additional sealant and plaster deterioration issues." Vertical wood trim deterioration was also discovered, and repaired with epoxy wood restoration products, and new wood to match the existing where elements were beyond repair. Local craftsman **Joe Mitchell of Inland Millworks** met the craftsmanship challenge, creating new trim to match the 1898 scalloped surface – itself a simulation of English Tudor construction with a tool called an adze, best described in laymen's terms as a scooped hatchet. One final challenge was getting the special board-length ridge caps fire-retardant treated to match the rest of the roof. The treatment process limited lengths to six to eight feet.



Carriage House dormer, showing step flashing integration with existing base flashing, and adzed trim to be restored, July 2016. Photo courtesy of BCI.

The Eastern Washington State Historical Society, dba Northwest Museum of Arts & Culture, which maintains **Campbell House** and the Carriage House as an historic visitor attraction, is open to the public. Tours continued throughout the reroof project, with safety being paramount for crew, staff, and visitors at all times. Scaffolding was used to catch debris and protect foundation garden plantings. Not only did the roofing crew work around public tours, the job site itself made for some tight maneuvering of equipment. The buildings sit atop a ravine cliff so the only access road was at the front and sides. Not much space was available for large equipment and it was definitely a creative challenge to get the job site trailer, equipment, and product in place. As this is an historic restoration, there were a host of design details critical to the period design, which needed to be respected during the reroofing process. Backwards downspout connections were located and corrected in a few areas. The property is surrounded by various species of tall trees, so future maintenance will need to include keeping the field area and gutters clear of debris.

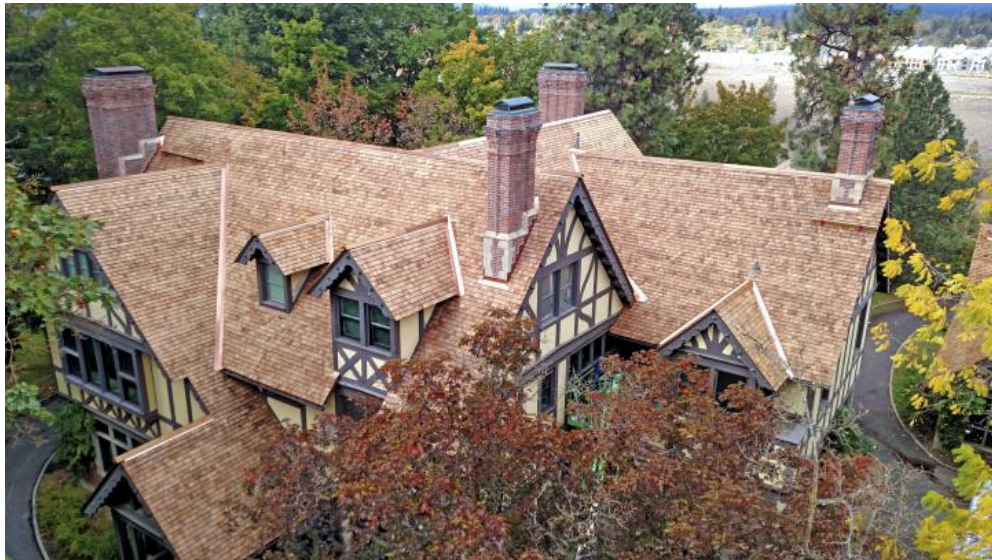


Campbell House during tear-off and sheathing evaluation, showing tight sheathing, August 2016. Photo courtesy of BCI.



Reroofing the carriage house in 2016. Photo courtesy Tony Hyatt, Cedar Shake and Shingle Bureau.

Another part of the current funding allows for the restoration and UV-film application onto storm windows. The UV-film will protect delicate draperies, upholstery and artwork from the sun's damaging rays.



Campbell House showcases a new Certigrade® shingle cedar roof. Photo courtesy of BCI.

Preserving the Past

William Otis, based in Cleveland, Ohio, created the original interior design plan in 1897-8. **Rooney** counts her museum very fortunate to have this original decorator's plan with dozens of original fabric and wallpaper samples attached. As the house transformed from local museum to sole-purpose historical home, shelves were moved, closets examined, and restoration work carried out. Original wallpaper was found behind the third floor storage cabinet. Linoleum fragments were found underneath the old mineral display cases. **Rooney** also tells the fascinating story of excavating a wall cavity until she found a tiny piece of glazed tile that served as authentication for a room's restoration work.



Photo of kitchen with reproduction Campbell House wallpaper. Photo courtesy of Northwest Museum of Arts & Culture/EWSHS.

Wallpapers were reproduced by a silk-screening firm in California and colors are a true feast for the eyes.

Portland architect Alfred Staehli, "an amazing renaissance man," expertly guided the important

1990s restoration work. Old house photos showed pilings and large stone out back; through careful analysis, the home's gazebo was able to be rebuilt in the exact place where it stood in 1898.

Campbell House's Fascinating Past

Campbell House was once a glorious family residence, housing a wealthy family. Next door were two other homes also

designed by architect **Kirtland Cutter**, which were occupied by the families of **Amasa Campbell's** business partner, **John Finch**, and their lawyer, **W.J.C. Wakefield**. All three homes still stand today.

The **Campbell Family** took two exotic trips: one to Europe and one to Egypt, and their home features sculptures, objects d'art, and watercolors from these travels. Overall, their furniture is high quality, but understated, most purchased new in 1898. Artwork, too, was primarily framed watercolors and prints. Instead of ostentatious wealth, what one feels upon entering the house is the authenticity of a well-to-do family that had earned their money and enjoyed it with decorum. The **Campbell's** daughter **Helen** had a wonderful array of activities to keep her busy and entertained.

The **Campbells** entertained a lot, but the dining room only seats 12 people. **Amasa Campbell's** business interests included mining, banking, ranching, grocery and he even owned stock in a box factory in Western Washington's lumber region. Many of the formal dinners in the 13,600-plus square foot home served both social and business purposes. After he died in 1912, **Grace and Helen Campbell** continued the tradition in their own way. This was an era where proper etiquette meant leaving a calling card at a hostess' residence, to be presented to her on an elegant silver tray by a member of staff.

History in Each Room

Helen Campbell and two of her cousins were married in the family library, just to the left of the gothic arch front doorway. The family safe in the basement is recessed into the wall, surrounded on all sides by a layer of brick. This protected the valuables inside from both theft and fire. Another interesting part of the house is where the servants worked.



Den Safe. Many large homes included a built in safe for storing valuable documents, silver and jewelry for protection from fire and theft. Photo courtesy of Northwest Museum of Arts & Culture/EWSHS.

The laundry showcases a lace crimping machine, and the kitchen's cold storage room is still here. A wood chute from outside allows visitors to see how early heating methods were employed. **Campbell House** employed 5-7 staff at any one time, including a coachman and a gardener. **Rooney's Team** read cancelled checks and city directories to identify 104 people who worked on site, determined average staff size, then gathered their memories of the house and former employer.



Guests and family alerted servants to their needs by using the annunciator (call bell) system. When a bell rang, servants checked this master panel in their first floor hall to see which room had an arrow hanging ajar. Photo courtesy of Northwest Museum of Arts & Culture/EWSHS.



Vintage bicycle. Photo courtesy of Northwest Museum of Arts & Culture/EWSHS, [2004.1].



Museum display in Campbell House Veranda, c. 1926-30. Photo courtesy of Northwest Museum of Arts & Culture/EWSHS, [L90-209.3].



Brougham Vehicle, c. 1887. Photo courtesy of Northwest Museum of Arts & Culture/EWSHS, [4162.1].



Ice delivery wagon at Finch House, Browne's Addition, c. 1910. Photo courtesy of Northwest Museum of Arts & Culture/EWSHS, [L93-87.17].



Rauch and Lang Electric Car, 1915. Photo courtesy of Northwest Museum of Arts & Culture/EWSHS, [175.148]

When the purpose-built **Cheney Cowles Museum** was built next door in 1959, **Campbell House** was repurposed into a single-focus house museum. Out went the mineral cases, herd of taxidermy specimens, and American Indian displays. Local history is now in the museum's main building.



Checks paid for repairs after 1920 roof fire. Photo courtesy of Northwest Museum of Arts & Culture/EWSHS, [MS 38].



2 girls dancing, ca. 1904. Photo courtesy of Northwest Museum of Arts & Culture/EWSHS, [MS 179].



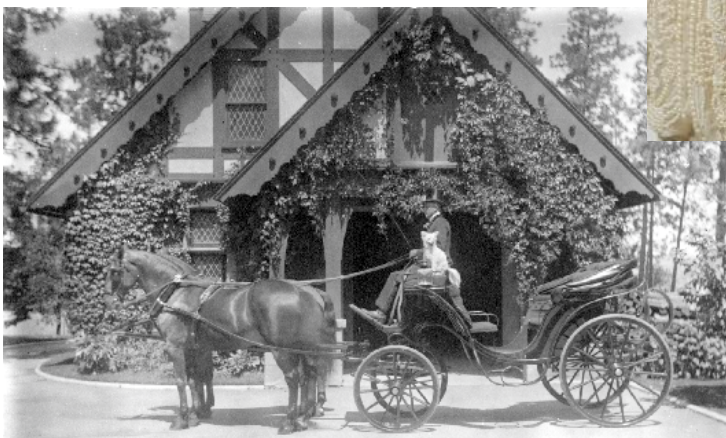
2 girls in pony cart, ca 1904. Photo courtesy of Northwest Museum of Arts & Culture/EWSHS, [MS 179].



Helen & Grace Campbell, c. 1908. Photo courtesy of Northwest Museum of Arts & Culture/EWSHS, [L91-119.3].



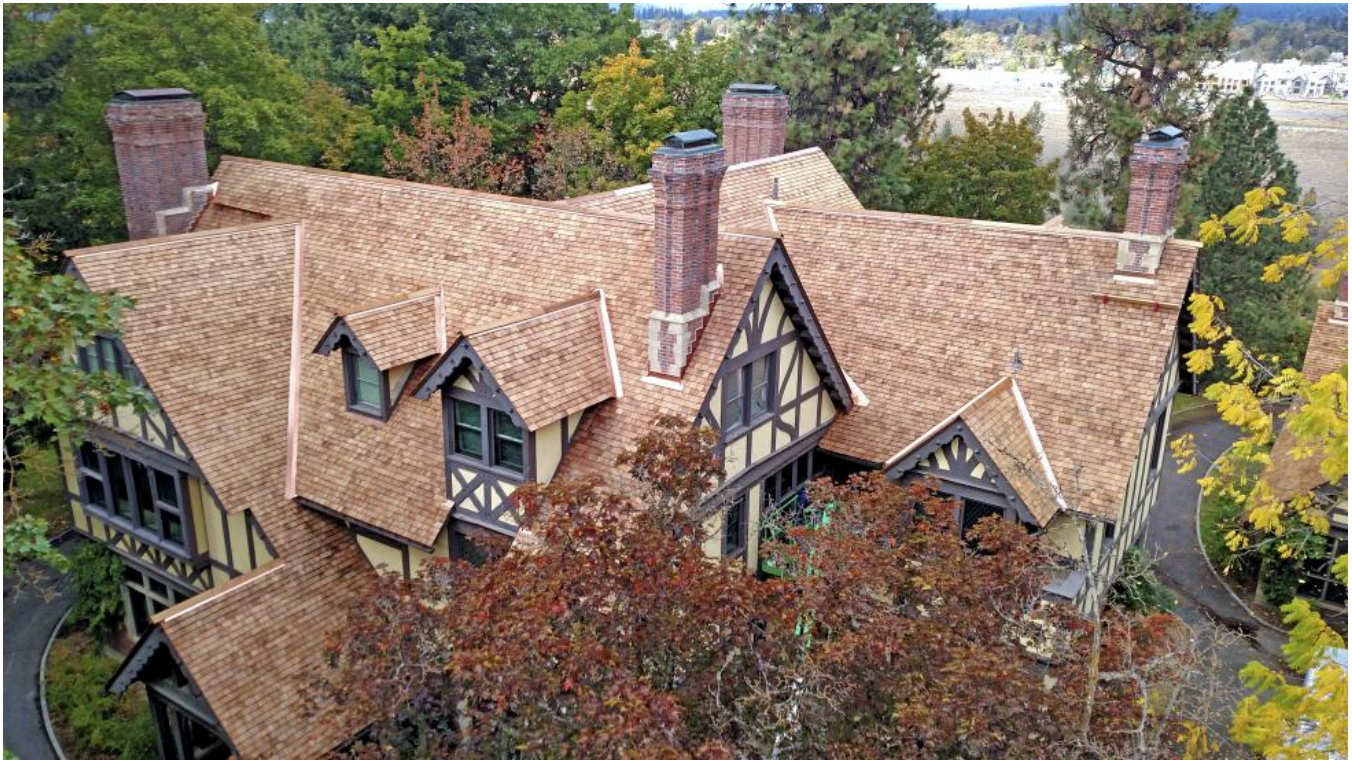
Helen Campbell's "Dance Frock", circa 1914. Custom-made by Eugenie Gowns of New York City. Coming of age during the early 20th century, Helen enjoyed looser dress styles as well as new freedoms for women, such as voting and driving. Photo courtesy of Northwest Museum of Arts & Culture/EWSHS, [3096.2].



Coachman Joseph Gladding & carriage, c. 1898-1905. Photo courtesy of Northwest Museum of Arts & Culture/EWSHS, [L87-393].



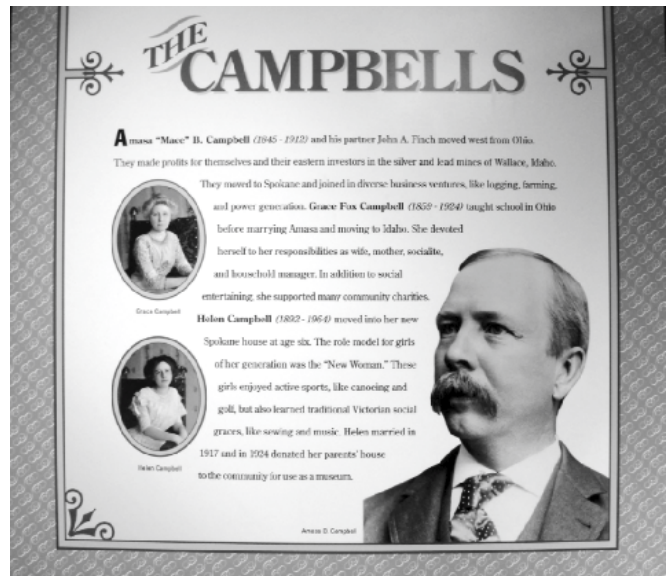
Tall clock, purchased in 1898 for the main hall of the family's new home. Its dark-stained carved oak case houses a movement and dial by J.J. Elliott of London. Photo courtesy of Northwest Museum of Arts & Culture/EWSHS, [784.52].



Completed Campbell House roof, October 2016. Photo courtesy of BCI.

Conclusion

It's fitting that **after the Cedar Shake and Shingle Bureau** celebrates its 100th birthday, a new case study tells the story of **Campbell House**, operated by a museum celebrating its own centennial in 2016. This project is very special in that so many of the visitors (and even roofing crew team members) remember touring Campbell House during elementary school. This has gained a lot of local pride in carrying on the property's legacy for future generations. Everyone is encouraged to see the precious preservation efforts at work. Today, **Rooney** knows the fourth generation Campbells and all are very supportive of the museum's efforts, which are slated to include exterior painting, sandstone, and leaded glass window restoration as the next big projects. One can only wonder what treasures **Campbell House** will hold within its walls in another 100 years!



The Campbell Family legacy is preserved for future generations. Photo courtesy Tony Hyatt, Cedar Shake and Shingle Bureau.



Written by:

Lynne Christensen is the CSSB's Director of Operations. She has worked for the CSSB since 1998 and is involved in a variety of departments with a focus on marketing. Christensen holds a Master of Business Administration degree as well as the Certified Association Executive credential. She resides in British Columbia.



All Photos by (except where otherwise marked):

Tony Hyatt is the CSSB's District Manager, Northern Midwest. He has been in the roofing industry since 1977 and is an experienced field representative in business to business and direct sales, small business management, and regional marketing of roofing products. Tony shares his vast knowledge with a variety of marketplace audiences, conducting educational seminars in multiple states. He also owned and operated his own roofing company in the State of Wisconsin.



Do you have a Certi-label™ project that qualifies for a case study article? Email Lynne Christensen, Director of Operations, with more details. While we can't promise to profile every project brought to our attention... we do try our absolute best!