CONSTRUCTION FEATURES

By studying the axe marks made by the builders, it is possible to identify the number of builders and their varying levels of skill. There were two groups of at least five people each who worked on the building. These people came to the Molalla area prepared to build a permanent structure. They brought tools with them including: adzes, slicks, broad axes, chisels, drills, drawing knives and saws.

No iron nails were used in the original construction of the Molalla Log House, indicating an early date of construction when the builders may not have had nails. The builders had previous experience in building without nails and they could make a permanent building without them. By the late 1830s nails were available and used in the Willamette Valley. Small square nails, available to pioneer builders in the 1840s, were used to attach shed roofs to the gable ends of the log house, sometime after it was originally built.

The original builders planned for two large windows on either side of the house. Saw cuts were made in the logs when originally hewed but were never cut in to make window openings. The original plans for the log house were abandoned and it was left unfinished on the landscape, sealed against the elements with no openings, except a single door. The building was dark on the inside for decades, as we see it reconstructed today.

HISTORIC LANDMARK

The Molalla Log House was designated a Clackamas County Historic Landmark in 1991 because of its fine craftsmanship, age and rarity. In 2008 preservation experts discovered that the roof of the building had caved in and many logs were deteriorating. In order to save it, the house was dismantled and the logs were placed in storage. After years of rehabilitation, funded primarily by the Kinsman Foundation, the logs were moved in 2019 and 2020 to Hopkins Demonstration Forest. The house is now being reconstructed. The preservation team studied the building with the goal of staying as true as possible to the craftsmanship of the builders. Original logs were rehabilitated and new ones were hewed to replace old rotten logs.

Historic research revealed that the building was dismantled and moved by horse and wagon to the corner of Wilhoit and Wildcat Roads in 1892. An eye witness to the move said that it was ‘very old’ when it was moved, but never told where it was originally built. A preliminary archeological survey of the possible original site did not reveal information, but more study may be revealing.

VISITING

Visitors of all ages who are interested in forestry, woodcraft, architecture and history will enjoy the woodcraft of the Molalla Log House and ponder the culture of the builders that made this building so long ago.

HOPKINS DEMONSTRATION FOREST
16750 S. Brockway Rd., Oregon City, OR 97045
demonstrationforest.org

Experience the Molalla Log House
- View a documentary film in Everett Hall at Hopkins Demonstration Forest
- Take an energetic hike to the current site
- Enjoy videos & information on our website

Open to the public to explore the woodcraft and history of this unique log building
HISTORY

The historic Molalla Log House, located in the heart of Hopkins Demonstration Forest in Clackamas County, is open to the public to explore its unusual woodcraft and history. Where and when this log house was built in the Molalla area is unknown. Why people came to the Pudding River watershed, in the foothills of the Cascade Mountains, and built this log house remains a mystery. There are clues in its design and craftsmanship that yield much insight and information about its history.

The building is a “primary resource” for studying facts about the log structure. Although there is no documented written history explaining the origins of the Molalla Log House, the logs themselves tell their own story. There are clues in its design and craftsmanship that yield much insight and information about its history.

The building tradition exhibited by the Molalla Log House resembles fur trade log structures built by craftsmen builders employed in the Canadian fur trade. From the mid 1700s the North West Company fur traders were building untold hundreds of fortified square hewn log fur trade buildings across the boreal forests of Canada. By the late 1790s and into the 1800s they carried this building tradition west of the Rocky Mountains to British Columbia and into the Oregon Territory. This cultural building tradition may have emanated from British military fort design and fortified log structures, built during the French and Indian War and the Revolutionary War.

The earliest documented explorers and settlers entering the territory of indigenous peoples west of the Rocky Mountains in the late 1790s and 1800s, were fur traders of Canadian, European, Iroquois and metis ancestry. It is possible that this culture of people may have built the Molalla Log House.

BUILDING DESIGN

The design of the building and the logs themselves give clues about the builders and the building’s possible age. The woodcraft of the Molalla Log House exhibits a foreign building tradition, unlike typical Oregon pioneer log cabins that were used temporarily, until they built their traditional wood frame farmhouses. The softwood of the Douglas-fir allowed builders to hew the logs square and straight after curing, which created a tight fitting building without spaces between the logs. American pioneers, most familiar with hardwood, built log cabins that had spaces between the logs and required daubing to fill between the gaps.

The Molalla Log House was built for permanence and security and was fortified against the weather and other potential hostile elements. This building design, with good maintenance, allowed the structure to stay dry on Oregon’s landscape for perhaps two centuries. It is evident that the builders had much experience in building expertly crafted log structures made with softwood like Douglas-fir. The wooden floor joists, the corner notching and the finely peeled and carved rafter poles illustrate the high level of skill of the builders.

The Molalla Log House is a small functional building with a compact and efficient design. It measures 18’ x 25’ and has a gable roof. Large mudsills rest on foundation rocks and support 17 additional horizontal logs on each side to make the 1½ story building. The ground floor appears to have been a single room and the second floor loft provided a very usable space with standing room in the middle.

DETERMINING AGE

Although wood dating studies have not been conclusive, they give reason to suspect that the Molalla Log House pre-dates Oregon pioneer settlement. Much effort has been made to establish the approximate date that the logs were felled in the forest. The tree rings of the Molalla Log House logs were compared with several Douglas-fir trees of known cut dates from forests in the Molalla vicinity. An analysis of log end erosion was conducted which compared the dovetailed log-ends of the Molalla Log House with pioneer log structures of known dates. These studies, along with other building clues, have led researchers to speculate that the log house may have been built as early as the late 1790s.