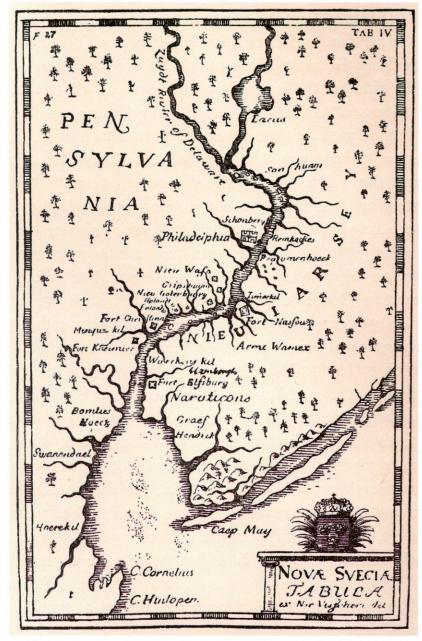


Swedish Log Cabin

"Queen Christina renounced, in favor of the Swedes, all claims and pretensions the English had in that country... The first colony was set off, and Peter Menuet was placed over it,... setting sail from Gothenburg in a ship of war, called the Kalmar Nickel, laden with people, provisions, ammunition and merchandise suitable for traffic and gifts to the Indians."

—REVEREND ISRAEL ACRELIUS, Account of the Swedish in New Sweden (1759)

Every American knows that Abraham Lincoln grew up in a log cabin, the symbol of our humble roots. We are taught that the log cabin was a homegrown frontier invention, but that turns out to be a myth. Instead, the idea arrived in America with Swedish colonists who planted a short-lived colony on the Delaware River. For the next three centuries, the Swedish log cabin spread from Pennsylvania to Texas and over the Rockies as the iconic frontier dwelling.



The New Sweden colony was founded along the shores of the lower Delaware River, a disputed area that the Dutch of New Netherland considered part of their New World colony, later incorporated into Pennsylvania.

High up in the Ruby River Valley of southwestern Montana, a salvaged early 20th-century log schoolhouse has been re-created as a mountain retreat by architect Candace Tillotson-Miller. Her Ruby River Cabin is a distant cousin of America's early Swedish log houses, its rough-hewn squared logs, dovetailed corners, and clay chinking unchanged since pioneer times.

THE LOG CABIN MYTH

Log cabins are the most revered of all American house types. Legend has it that English colonists began to build with logs as soon as they arrived in the New World, but the English had no log-building experience in their homeland, nor did early Spanish, Dutch, or French settlers. While the French adopted upright log construction for their first homes in Acadia, they set logs vertically in the ground rather than horizontally, like the stockades of a frontier fort.

True stacked-log building was introduced by the Swedes who came to America in the early 17th century. After decades of overpopulation and poor soils at home, Swedish peasant farmers left the provinces of Dalarna and Värmland and transported centuries-old Scandinavian log construction to the New World. Although the colony of New Sweden lasted only 17 years, the Swedes left a permanent legacy of homebuilding.

SHORT-LIVED NEW SWEDEN

New Sweden was founded in 1638 when former Dutch governor Peter Minuit, hired by the New Sweden Company to develop the fur trade, sailed into Delaware Bay to start a colony at Fort Christina (present-day Wilmington). Within five years, the Swedes had gained a toehold and fortified their grip by founding Fort Elfsborg on the New Jersey side of the Delaware River. From there they expanded settlement northward in small farms and Indian trading posts, always wary of Dutch threats from New Netherland to the north.

They were right to be worried, for the Dutch believed that their colony included the Delaware, a boundary known to them as the South River. Soon the hot-tempered governor of New Amsterdam, Peter Stuyvesant, had suffered enough Swedish humiliation. In 1655 he sent a fleet of ships to reclaim the Dutch territory, and realizing that resistance would be futile,



What became the classic American log cabin was virtually unknown to the Spanish, Dutch, and English. While the French used upright log building in Acadia, the Swedes were the first to use stacked-log construction with logs laid horizontally and crossed at the corners.



SCANDINAVIAN LOG CABIN

he Swedish log cabin traces its roots to the medieval *stugas* of Scandinavia. Most of these early single-story cottages were made of logs or hewn planks, often beneath a thick roof of sod for insulation. The centerpiece was a large stove room called a *stuga*. The stuga had a two-sided fireplace built into one corner. In addition, there was a *forstuga*, a small room that served as an entry hall, and a *kammara* that was a bed-chamber. This three-room arrangement remained essentially unchanged in American log cabins.

TELLING DETAIL

LOG CORNER NOTCHES

The most distinctive feature of log construction is the corner notch, cut into the ends of logs to make them stack firmly in place. The most common types are the saddle notch, the V-notch, and the half-dovetail. The saddle notch is most familiar, where round logs overlap with their ends projecting at the corners, like Lincoln Logs®. In a V-notch (top below), each log is cut on its top and bottom edge with male and female Vs that mate when stacked. The complex half-dovetail notch (bottom below) is saw-cut in the shape of a bird's tail and angled so that two overlapped corners lock in a rigid joint, each slanted so that rainwater drains out of the joint.





Governor Johan Risingh and his outnumbered Swedes surrendered without a shot. But Dutch control did not last long, for the colony was turned over to England only nine years later.

When Englishman William Penn received his charter for Pennsylvania in 1681, his lands included the three Delaware counties of New Sweden. Penn became a devoted fan of the Swedish log cabin and so admired its practical system for building homes quickly that he urged his European immigrants to follow the Swedish plan. English Quakers, German Rhinelanders, and Scots-Irish eagerly took Penn's advice as they settled into log cabins in the countryside around Philadelphia.

A QUICK AND EASY HOME

Penn's plan for a log house followed the Swedish model exactly, with walls of stacked logs covered by a gable roof of long split shingles. It could be built by unskilled



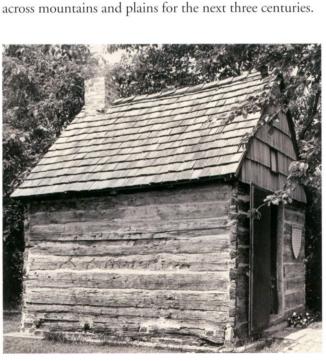
Ruby River Cabin is a salvaged early 20th-century log schoolhouse that has been re-created as a mountain retreat in the highlands of the Medina River Valley in southwestern Montana.

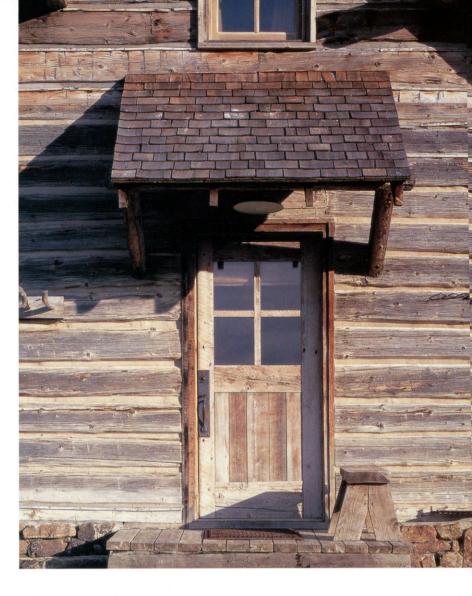
Hewn log cabins were the pioneer dwelling of choice for frontier Americans migrating across the Midwestern plains and into the Rocky Mountains, where the Swedish tradition survived into the early 20th century.

hands using a common broadax and assembled with little help. Large trees were plentiful across the American frontier, making logs a natural by-product of clearing the land for cultivation. Easy to build using readily available materials, log cabins caught on like wildfire with early settlers.

Not everyone admired the early American log cabin. One visitor whined that "the miserable dwellings of this place consist of logs piled one above the other with mud and moss to fill up the crevices."

Round logs chinked with clay leaked cold air and were hard to keep dry as green lumber shrank and swelled with the seasons. The logs would inevitably rot when water collected in corner notches. These problems were solved by better methods of squaring hewn logs and cutting dovetail corners to drain off rainwater. Hewn log cabins then became the pioneer dwelling of choice for frontier Americans, changing little as they migrated across mountains and plains for the next three centuries.







Early Swedish log cabins were made of stacked oak logs under roofs of hand-split shingles. They were quickly and easily built by unskilled colonists using a common broadax and assembled with the help of willing neighbors.

(left) The Early Plank House in Lewes, Delaware, is a surviving example of the early houses of New Sweden. Possibly used as a dwelling or as slave quarters, the house has notched plank walls that were common in log building in 1740s Delaware.

A Rocky Mountain Schoolhouse

The reconstructed Ruby River Cabin started life as a frontier schoolhouse built in a high valley settled after Montana's gold rush of 1863. Architect Candace Tillotson-Miller uprooted the old schoolhouse and reset its well-preserved logs on new granite foundations, adding a few sympathetic changes such as a screened porch and shed-dormer roof.

The frontier-plain structure is a timeless survivor in this Big Sky valley. Its large hewn oak logs must have been harvested at a time when sturdy hardwoods were plentiful. Square-hewn logs like those used for Ruby River Cabin were an improvement on round logs because they could be stacked tightly together. Dovetail joints hold the logs in place where they overlap at the corners.

The long logs used for the roof beams of the cabin project beyond the face of the gable ends by several feet:



The cabin has been rebuilt as a fishing camp on the banks of the Ruby River, one of Montana's premier trout streams. The log cabin was lifted from its former site and moved onto new granite foundations, with additions for a screened porch and sheddormer roof.

(opposite page) The rustic simplicity of log walls chinked with mortar colors the character of Ruby River Cabin. This relaxed mountain retreat blends roughhewn plank floors with a fireplace built of granite blocks.

→ WORDSMITH ¬

· chinking ·

Probably derived from the Old English word *chine*, meaning "crack," *chinking* is the material used to fill voids left between logs in building log walls. When hewn logs are stacked into walls, they seldom fit together well enough to be weather-tight, so builders fill them with *chinking*, stuffing the crevices with old cloth, straw, moss, or small stones mortared together with clay and sand. Today's log builders chink with a synthetic mortar that flexes with the wood and has a sand finish that passes for real clay.

one at the ridge line, one at the midpoint of the roof, and another at the eave line. The projecting beam ends are cut in a series of steps to make them decorative as well as structural, adding artistic flair to the job of carrying the eaves and roof rafters.

Chimneys and fireplaces were among the most difficult things for pioneers to build, but they were essential for cooking and warmth. The first chimneys were made of sticks formed into a primitive flue and coated with clay mortar. These early chimneys, called Welsh chimneys, were prone to catch fire, so in time they were replaced with stone and brick. Since skilled masons were in short supply in the outback, frontiersmen had to fend for themselves.





(opposite page) There is nothing fancy about the cookhouse kitchen of weathered barn boards with cabinets tucked into a corner off the living room.







(top left) Long log roof beams project beyond the face of the gable ends of the cabin by several feet. The ends are cut in a stepped profile that adds decorative detail to their rustic simplicity.

(top right) The original squarehewn hardwood logs were cut and carted from the hills surrounding the mountain valley. Dovetail notches hold the logs together where they overlap at the corners.

(left) Some interior beams have been left as round logs, while those that are squared show the telltale marks of being hewn with a broadax. The new chimney at Ruby River Cabin shows the patient effort required of pioneers to fit rough stones into a structure of interlocking blocks. First, rocks had to be collected off nearby ledges, then hammered into roughly square chunks, hauled up ladders, and mortared in place with mud and sand. If you weren't good at it, the whole pile would tumble down before you were done.

Primitive preserved

Ruby River Cabin shares the classic three-room plan of an early Swedish log home. Since the cabin is a hunting and fishing lodge, the living room is open to the ceiling with trophies mounted on the walls. The log walls are treated just like the outside of the cabin, finished with sand-colored synthetic mortar chinking. Rough-sawn oak planks are used for floorboards,

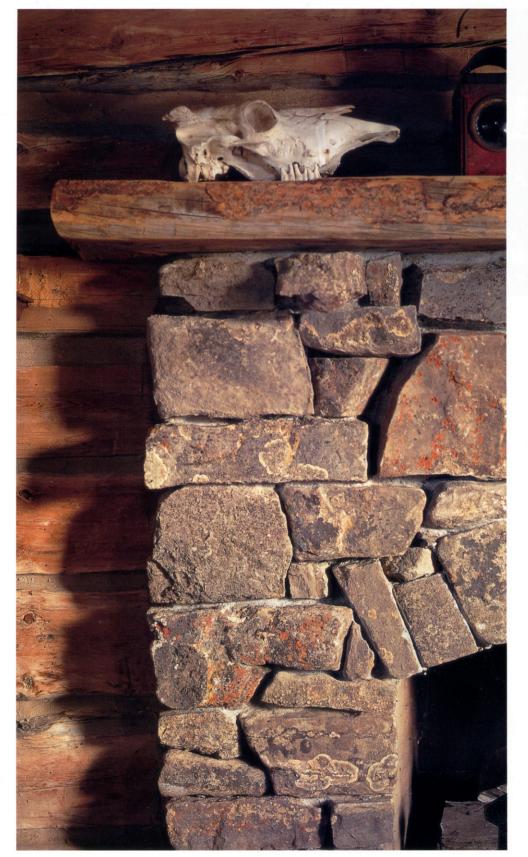
which are fastened in place with square-cut nails hammered through the faces.

The kitchen resembles a primitive frontier cookhouse tucked off in one corner of the living room. The cabinets and plate racks are rough barn boards nailed together with their weather stains on display. In this small space, there is just enough room for one person to cook chow.

The same rough-hewn look is true of the bathroom, where the towel bars are branches on a tree stump. In one corner an old ceramic sink hangs off the log walls with no provision for counter space. The shower is a galvanized steel washtub hauled out of the barn with a hoop ring for a shower rod. As crude as these details may seem, they have been carefully crafted by Tillotson-Miller to preserve Ruby River Cabin as a rustic log cabin rather than a slick dude ranch.



On the back porch of the cabin, antique timber posts and beams frame picture-perfect views of the mountains of southwestern Montana's Big Sky country.







(above top) The front door to the cabin opens into a pocket-size vestibule.

(above bottom) Architect Tillotson-Miller had doors custom made from rough-sawn fir boards with the saw marks still showing, left unfinished to weather over time. One of the door handles is made of a curved birch tree branch, bark and all.

(left) The fireplace is intended to look pioneer handcrafted, with chunks of weathered granite that range in size from chips to boulders. The stones are laid up evenly in a dry-stacked pattern so that every stone edge shows. A thick stone slab caps the fireplace as a mantel shelf.