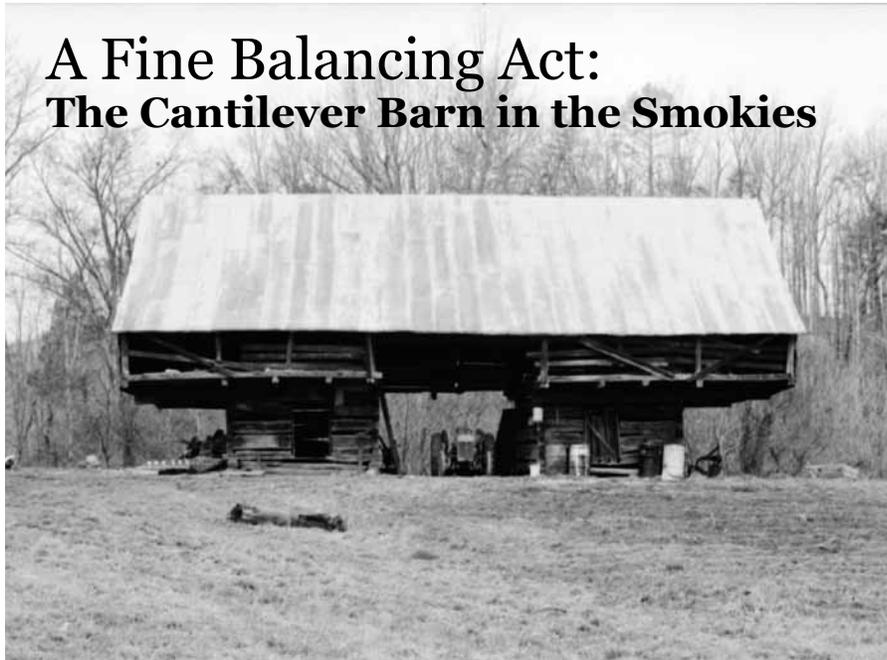


GREAT SMOKY MOUNTAINS Colloquy

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A Fine Balancing Act: The Cantilever Barn in the Smokies



CATTLE SEEKING SHELTER FROM HEAVY RAINSTORMS THAT VISIT THE Smoky Mountains lowlands would often wander in from the fields and gather under peculiar overhangs that extended from the sides of barns. These overhangs were haylofts ingeniously cantilevered on the tops of log cribs eight to ten feet high, hence the term cantilever barn.

Cultural anthropologists have identified the cantilever barn as a distinctive building type unique to the mountainous regions of Tennessee and North Carolina and particularly indigenous in and around the Great Smoky Mountains. Although there were once well over a hundred cantilever barns in the Smokies region, most of those within the Park have been either torn down or burned. The best surviving examples are the Tipton and Lequire barns along Cades Cove Loop Road and the Messer barn in Porters Flat.

The outstanding characteristic of the cantilever barn is the second-floor loft which extends or cantilevers out from the top of ground-level cribs. The more typical form is the double cantilever in which the barn's loft



RIGHT AND ABOVE:
Rule Barn, Sevier County

continued on p. 2...



A new digital collection from the Smokies Project features panoramic views—many with the mountain peaks labeled (see p. 3).

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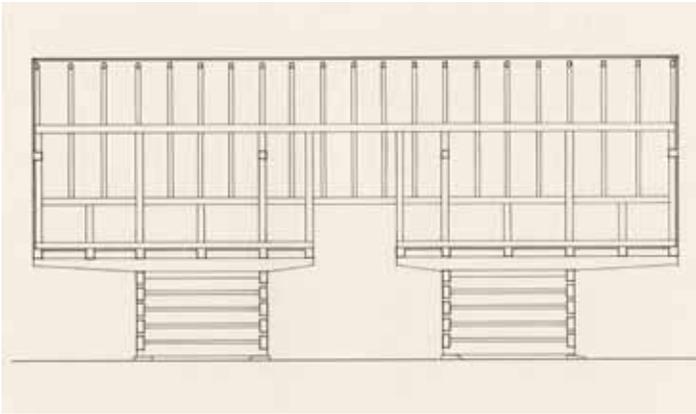
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Ingles Barn, Sevier County. Measured drawing by Kenneth Moffett.

extends eight to twelve feet on all sides of the supporting log cribs. Variations include double cantilevers with one crib, double cantilevers with four cribs, and single cantilevers with either one or two cribs. In any case, the cantilever design permitted large haylofts to be set on the tops of small log cribs with the weight of the overhangs counterbalanced on all sides. This design offered covered space without the use of support posts that might restrict the movement of farm wagons and sleds.

It is likely that the cantilever design filtered into the Smoky Mountains by way of German settlers whose ancestors emigrated from the heavily forested areas of Europe. There, the upper floors of houses and other buildings were often cantilevered as much as five feet over ground level. Climatic and topographical conditions in the Smokies were conducive for the settlers to adapt the construction techniques of their forebears to their new environment.

Many of the barns in the Smoky Mountain region appear to have been built during the mid-nineteenth century using thick timbers squared with wide-bladed axes. Even though by this time sawmills had been established along the larger streams, it still would have been more advantageous for farmers in the Smokies to construct barns out of large timbers hewn from nearby trees rather than hauling the trees to a sawmill to be planed into lighter boards.

Equally important may have been the effectiveness of the cantilever design in protecting the wooden structures from termite infestation. Termites require proximity to moisture to survive. Given the damp ground condition of much of the mountains and the fact that some areas receive as much as sixty to eighty inches of rain annually, the wide perimeter of dry

ground around the barns created a near-impervious barrier difficult for termites to cross.

Others have speculated that the primary attractiveness of the cantilever design is the convenience it afforded in feeding cattle during the winter months. Although it snows considerably in the mountains, it is rarely cold enough in the lower elevations that cattle need to be herded into barns to escape the weather. When the ground was wet or covered with snow, hay could be dropped out of the loft onto the dry ground below the overhang to feed cattle driven in from the fields.

In the double cantilever barn with two cribs illustrated here, the cribs generally measure approximately twelve by eighteen feet separated by a central divide of ten to twenty feet. The uppermost timbers along the shorter length of the cribs cantilever out to the sides, becoming the supports for a second set of cantilevers extending the width of the loft. These secondary cantilevers support the loft floor and walls. A set of post trusses, usually positioned over the corners of the cribs, support a series of horizontal timbers running the length of the barn. Light rafters complete the frame which is covered in shingles or boards. Horizontal board siding is the most common exterior wall finish.

The logs in the cribs are most often secured by half dovetail joints, although V-notching and square notches are common. The best-preserved examples of cantilever barns in the Smokies—the Tipton, Lequire, and Messer barns—are examples of the three most common corner joints found in log-cabin architecture.

The architecture of the cantilever barns reflects the ingenuity of the Smoky Mountain farmer in adapting a unique design that was not only functional but was capable of surviving the mountain's environmental conditions and demanded only building material available in the immediate vicinity. These humble agricultural structures are as valuable as architectural artifacts as the wooden forts, stone castles, cathedrals, palatial homes, and grand plazas of other bygone eras.

SOURCES:

Marian Moffett and Lawrence Wodehouse. *East Tennessee Cantilever Barns*. Knoxville: University of Tennessee Press, 1993.

Marian Scott Moffett Papers, 1883-2004. University of Tennessee Libraries, Special Collections MS-3345.

Of Dynamite, Comets, and Historical Records

ON THE EVENING OF THURSDAY, JANUARY 20, 1910, LEE FRANCIS, THE Swain County register of deeds, and two young Smoky mountaineers, Omar Conley and Barret Banks, were preparing to do some fishing the next morning in nearby Tuckasegee River. In the attempt to make their fishing effortless, they had opted to use the good-ole-boy method of employing dynamite to stun the fish for easy collection. The three had gathered that evening at the Swain County courthouse to thaw out their dynamite on a heavy iron stove that heated the register's room. During the thawing process, one of the young men adjusted the fuse on a cap, which apparently burst, causing eight sticks of dynamite to detonate, blowing up the courthouse and much of its contents of official records.



Fishing the good-ole-boy way

On the same evening the dynamite was being thawed in the courthouse, seven year-old Claude Marr was hearing wild stories predicting the arrival of a comet discovered by astronomer Edmond Halley. The comet was the talk of Bryson City with some folk surmising that the celestial event would spell doom not only for Swain County but likely the rest of the world. Overcome with apprehension, young Claude Marr slipped out into the crisp mountain air and peered up into the heavens hoping to catch a glimpse of the comet's fiery tail. Without warning, the terrific explosion from the courthouse knocked the youngster to the ground. Startled, he jumped up, ran into the house, and slid under his mother's bed, knowing that the dire prediction of the end of the world had come true.

We rarely thaw dynamite on iron stoves at the University of Tennessee Libraries and consequently are a safe, secure, and environmentally-suitable archive for housing valuable Smoky Mountain records. If you have photographs, letters, manuscripts, or other historical Smoky Mountain materials that need permanent archival safekeeping, please contact us at smokies@utk.edu or (865) 974-0288.

SOURCES:

Court House Accident, *Bryson City Times*, January 27, 1910.

The Heritage of Swain County, North Carolina, North Carolina Genealogical and Historical Society, Bryson City, NC, 1987; p 224-225.

News from the Smokies Project

We are very pleased to announce the release



of The Panoramic Images of Elgin P. Kintner, MD. These images were originally created in the 1960s and 1970s as single photographs. With the magic of modern technology, the images have been stitched together to form a series of seamless panoramas, fulfilling the vision that Dr. Kintner had for his photographs. You can enjoy them at kiva.lib.utk.edu/kintner. Many thanks to Beccie King, Dr. Kintner's daughter, for her donation.



Thanks to our user community, Database of the Smokies (DOTS: dots.lib.utk.edu) now contains over 2000 citations to articles, books, government reports, websites, images and manuscripts. Whenever possible, we are providing full-text links. We are adding new material every day. And you can be a part. Create an account and join the growing user community by adding items to DOTS.



The Smokies Project is now on Facebook. We will use our page to connect our "friends" with news and events. Look for us by searching "Great Smoky Mountains Regional Project." And "like" us so your friends can learn about the Project too.

Coming soon! The photograph collection of Herbert Webster, an early twentieth century explorer of the Smokies, is our next digital project. The five hundred images in the Webster collection are primarily of the Tennessee side of the mountains during the 1930s.

Webster hiked with many other veteran adventurers in the Smokies including both Harvey Broome and Dutch Roth. His images will join Roth's and others to create a valuable historical record of the pre-Park era.



Herbert Webster, 1930s

New on the Smokies Bookshelf

NON-FICTION

Alfrey, Adam C. *The Great Smoky Mountains National Park*. Arcadia Publishing, 2012.

Beall, Sam with Marah Stets. *The Foothills Cuisine of Blackberry Farms: Recipes and Wisdom from our Artisans, Chefs, and Smoky Mountain Ancestors*. Clarkson Potter, 2012.

Hargan, Jim. *Blue Ridge & Smoky Mountains*. Countryman Press, 2012.

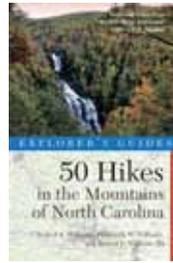


Harmon, Gene. *Under the Smoke: Personal Stories of the Smoky Mountains*. Gene Harmon (publisher), 2012.

Hiking Trails of the Smokies. 5th ed. Great Smoky Mountains Association, 2012.

McMahan, F. Carroll. *Sevierville* (Images of America). Arcadia Publishing, 2012.

Williams, Robert L., Elizabeth W. Williams, and Robert L. Williams III. *50 Hikes in the Mountains of North Carolina: Walks and Hikes from the Blue Ridge Mountains to the Great Smokies*. Countryman Press, 2012. Distributed by W.W. Norton and Co.



POETRY/ART

Ellison, George with artwork by Elizabeth Ellison. *Permanent Camp: Poems, Narratives, and Renderings from the Smokies*. Natural History Press, 2012.

MAP *Geologic Map of the Great Smoky Mountains National Park Region*. U.S. Geological Survey, 2012.

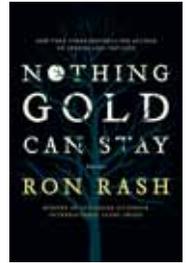
FICTION Larimore, Walt. *Hazel Creek: A Novel*. Howard Books, 2012.

Larimore, Walt. *Sugar Fork: A Novel*. Howard Books, 2012.

Rash, Ron. *Nothing Gold Can Stay*. Ecco, 2013.

Robbins, Sandra. *Angel of the Cove*. Harvest House Pub., 2012.

Robbins, Sandra. *Mountain Homecoming*. Harvest House Pub., 2013.



Stepp, Lin. *Delia's Place*. Canterbury House, 2013.

DVD *Great Smoky Mountains National Park Video Sampler*. Great Smoky Mountains Association, 2012.

The Mountain Farm Museum. Great Smoky Mountains Association, 2012.

JUVENILE Berenyi, Anne and Anthony Berenyi. *The Water Drop*. CreateSpace Independent Publishing Platform, 2012.

Hoppe, Patty. *Testing the Waters*. Write Off the Bookshelf LLC, 2012.



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