

## Traveler

### Shadows of a Cambrian shoreline

*Saddle Mound through the ages*

*Julie A.M. Hess, Robert J. Hess, Anna N. Hess and Abigail M. Bostwick*

Sometime deep in the Cambrian eon, a fierce rainstorm raged and a group of small, soft-bodied creatures meandered through the shallow, subtidal landscape seeking shelter on what would become Saddle Mound in Jackson County. Tempestuous water churned up the thick silt as these organisms made their way through sand. Never in their wildest dreams could their ganglia conceive that these murky waters would make them immortal.



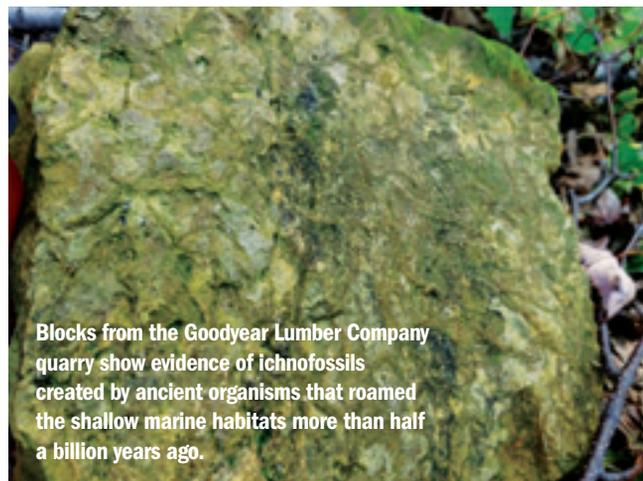
WISCONSIN HISTORICAL SOCIETY

**A tramway operated by the Goodyear Lumber Company moved quarried stone down the south slope of Saddle Mound.**

Around 510 million years ago, when Wisconsin lay somewhere near the equator, the trails that these organisms left behind were preserved in layers of silt and sediment and can now be observed in several areas across the state in a geological layer known as the Mt. Simon-Wonewoc formation. It is an Upper Cambrian formation easily identified by its sparkly, coarse quartz (arenite) sandstone. Examples are found not just in Wisconsin, but throughout the Midwest.

Many of these sandstone outcroppings are scattered through west central Wisconsin. In Jackson County elevations range from 760 feet on the sand flats at Shamrock to about 1,400 feet at the peak of Saddle Mound. Mt. Simon Upper Cambrian

sandstone is typically up to 115 feet thick and is popular for building materials. Quarries and rock-cuts in many of these



**Blocks from the Goodyear Lumber Company quarry show evidence of ichnofossils created by ancient organisms that roamed the shallow marine habitats more than half a billion years ago.**

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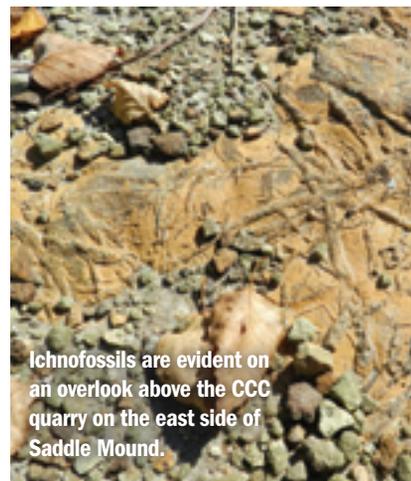
sandstone bluffs expose the bedding planes that were likely part of a scattered barrier island system. For the intrepid fossil-hunter, these rock outcroppings provide a rare glimpse at these trace fossils, where ancient organisms roamed through shallow marine habitats.

Preservation of these delicate organisms is a very rare occurrence in the worldwide fossil record. Some prime examples in the Mt. Simon formation have shown preserved mounds where jellyfish were likely beached during a storm, along with preserved trails and burrows where mysterious snail-like creatures moved through the sandy aquatic shorelines. Krukowski Quarry is a well-known Wisconsin example of Mt. Simon sandstone and hosts incredibly well preserved specimens of jellyfish and ichnofossils, or trace fossils. Most have been removed and donated to museums or private collections. These trace fossils

can also be found throughout the sandstone promontories of central Wisconsin, at Irma and Chase hills in north central Wisconsin and in west central Jackson County.

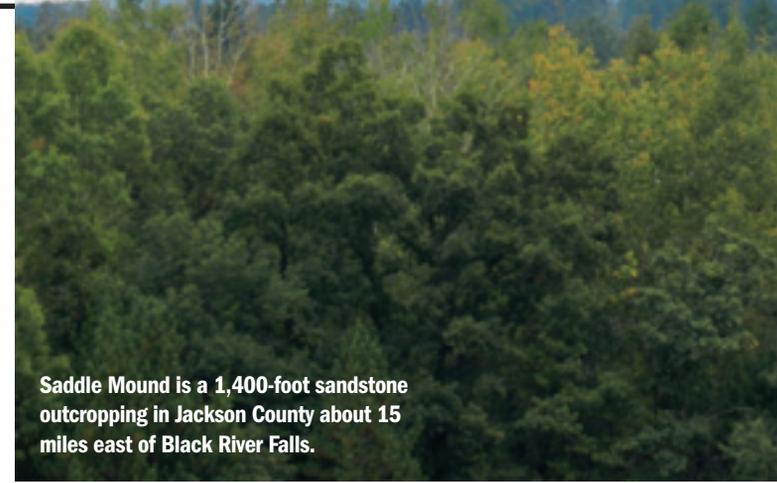
In Jackson County, at the top of Saddle Mound, what appear to be worm trails wind through the stone left exposed from century-old quarrying. Also, just north of Saddle Mound, in the area of the small unincorporated town of Pray, are other trace fossils called Climactichnites. These are band-like, ridged trails characterized by the fact that they show no trace fossil evidence of the animal bodies that made the tracks through the low-tide shallow-water habitat.

Today Saddle Mound is covered in tall pin oaks and blanketed by a thick carpet of Pennsylvania sedge and blackberries — quite different from its beginnings as a shoreline of a Cambrian marine environment. Tall, gritty sandstone faces are exposed to the elements,



**Ichnofossils are evident on an overlook above the CCC quarry on the east side of Saddle Mound.**

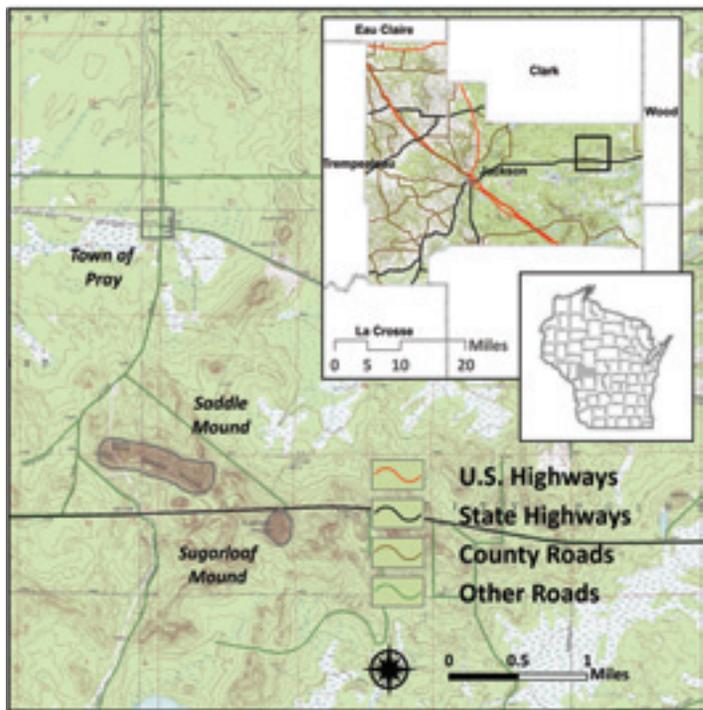
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**Saddle Mound is a 1,400-foot sandstone outcropping in Jackson County about 15 miles east of Black River Falls.**



ANNA HESS



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eroding more slowly than the surrounding areas, marking where these sandstone bluffs were once a murky shallow seashore.

Saddle Mound hosted several quarries over its history. Two are still visible with century-old drill holes evident on the side of the rock face. On the west side was the Saddle Mound quarry operated by the Goodyear Company. They mined surface stone outcroppings from 1891-1895 but were primarily involved in the logging business. The town of Goodyear was a small sawmill settlement in what is now Merlin Lambert County Park. The timber harvesting and quarry operation, built by C.A.

Goodyear from Tomah, prospered until 1894 when the area was completely logged off. In 1895 the mill was dismantled and shipped to Star Lake in northern Wisconsin, where it began a new operation in 1896. No longer profitable, the quarry also closed in 1895.

The quarry atop Saddle Mound had a double-track narrow-gauge tramway for moving quarried stone down the slope. Its eroded path is still evident today beneath the detritus of the forest floor, along with rusted remnants of steel cable. The tramway went straight up the south slope of Saddle Mound. Gravity was used to alternate tram cars, with the loaded car descend-

ing the slope, pulling the empty car to the top for loading. The bottom car stopped at a spur line of the Goodyear, Neillsville and Northern Railroad. There sandstone was transferred to rail cars and hauled southeast to Mather, transferred to rail cars on the main line, and then shipped on to Tomah and points beyond. Some

to area fire headquarters in Black River Falls.

Saddle Mound is a truly unique part of Wisconsin geology and local history. If you find yourself in beautiful eastern Jackson County, be sure not to miss the challenging hike to the top of Saddle Mound, and journey back in time to gaze at the ancient



Robert Hess sits atop the old narrow-gauge tramway on the slope of Saddle Mound.

ANNA HESS

of the stone was also hauled out by a horse-team, to be loaded onto the adjacent Green Bay and Minnesota Railway Line at the village of Pray.

During the 1930s, the Civilian Conservation Corps quarried stone from the east side of Saddle Mound to build the Tomah ranger station, the Goodyear Company building in Tomah, part of the school in Tomah and the nearby Pray ranger station. The CCC built a truck road up the south slope of the mound to remove materials. Now highly eroded in the sandy soils, the roadway reveals several sandstone rock-cuts.

A fire tower situated between the two quarries was also built in the 1930s and was recently decommissioned. A small cabin was built at the base of the mound for the agent who logged lonely hours in the tower scanning the skies for smoke. The site of the cabin is now evidenced by the small grouping of cedar trees at the bottom of the degraded truck road. This cabin sported a double-copper-wire crank phone system that ran from Saddle Mound to the Pray ranger station and from there across the cranberry marshes and Potter's flowage. Today, in Merlin Lambert County Park, an old road traversing west across the flowage marks where this old phone line went

traces of mysterious organisms in the sparkly sandstone. If in your future Wisconsin adventures you find fossils, you can report them to Wisconsin Geological Survey: [wgnhs.uwex.edu/about/people/experts/](http://wgnhs.uwex.edu/about/people/experts/)

*Julie Hess is a senior paper process engineer, moonlighting as a naturalist during her spare time. Bob Hess has more than 45 years of experience in natural resource management, many in the Jackson County area. Anna Hess is a natural resource manager for the Minnesota DNR, and spent many years working in Jackson County. Abigail Bostwick has studied earth sciences and documented ichnofossils across Wisconsin. She lives near Tomahawk and is the author of several young adult novels. Thanks go to the Jackson County Forest and Parks office for access to their archives, and to Kay and Tom Sholtz and Lynn Moeller for additional information on ichnofossils in the Pray area.*



## SADDLE MOUND HISTORY

For more history on the Saddle Mound/Pray area, look for a series of articles by Fred Rodgers published in the Black River Falls Banner Journal from 1936-1937, and "The Wisconsin Valley Line," written by Raymond Specht and John Cline in 1979. History on the fossils of these Wisconsin sandstone promontories can be found in "Wisconsin Through 5 Billion Years of Change," by Byron Crowns and other updated literature.