Shadows of a Cambrian shoreline

Saddle Mound through the ages

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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 waters 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.

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 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.
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 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 slope. The site of the cabin is now evidenced by the small grouping of cedar trees at the bottom of the degraded slope. 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 slope.

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.