

Historic Resources. The Williams Lake property contains superlative examples of historic room-and-pillar cement mines, as well as other important mining-related relict artifacts (e.g., kilns, chimney, building foundations). These artifacts speak of days of bygone glory when Rosendale was the cement capital of the world following the discovery of natural cement in 1825. Miners faithfully followed the Rondout dolostone along folded, faulted, and steeply inclined rock strata, sometimes to the dull roar of pumps when mining below the water table. Some of the mines on the property are among some of the safest in the region, making them well-suited for visitation by history buffs, geologists, and the public.



Icicles in a room-and-pillar cement mine

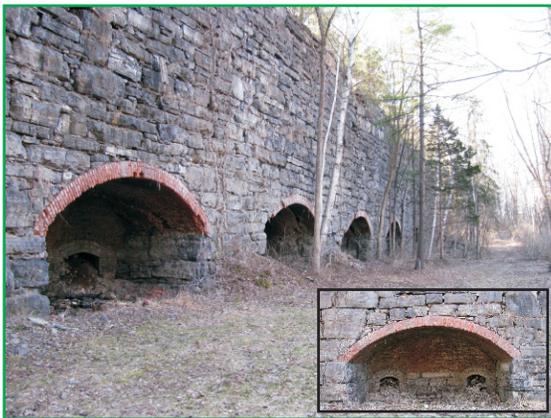


Indiana bat. Photo by: J. Scott Altenbach

Bat Hibernacula. Isolated cement mines on the property have provided critical hibernacula to six bat species for decades. They provide strongholds for one of the largest colonies of the endangered Indiana bat in NYS and the world. With the current threat to NY State's bat population stemming from White Nose Syndrome, property mines will only be of greater importance in the future as recolonization efforts get under way. A private conservation easement on 422 acres of the property provides important protection.



Excellent fault plane exposure in shallow room-and-pillar mine near Williams Lake



Kilns used in cement manufacturing



Williams Lake on an early fall morning

Geologic Paradise. Bedrock exposures and mines have been studied by acclaimed geologists and their students since the late 1830s. The property, its trails, and rail bed provide ready access to 400 million year old late Silurian and early Devonian rock strata, much of which has been massively deformed by tectonic processes. The property provides a natural outdoor classroom where geologists and others may examine multiple thrust faults and rock layers that have been folded upward into anticlines and downward into synclines. This location has become a classic destination of geologists seeking to examine bedrock structure and shallow marine fauna in the Hudson Valley fold-thrust belt. For research and education, the structural geology exposed in the mines and throughout the property is unparalleled.

Groundwater. Groundwater within the Williams Lake property is contained in fractured bedrock, in solutional conduits, and in mines that have disrupted and integrated pre-mining aquifer systems. Groundwater flow in limestone and dolostone formations is particularly complex, is vulnerable to contamination, and may be linked to bat hibernacula.



Former Walkkill Valley Railroad bed

For current information related to the Williams Lake property, please go to:
<http://www.savethelakes.us/>