

The Salt Mine Beneath Lake Erie

People have been using salt, also known as white gold for thousands of years. That axiom resonates true in January 2024. On any given day head down Rt. 44 North to 570 Headlands Road on the Painesville / Grand River border, navigate the Grand River channel or drive down Water Street in Fairport Harbor and look across the Grand River. One will notice a massive mining operation and piles of blue-hued salt mounds. That mining operation is known to locals as the Fairport Morton Salt Mine. The US dumps more than 19.5 million tons of rock salt, scattering it on our icy, snowy roads each winter. The company to meet that demand is known as Morton Salt. A key cog in their success story had its origins in Lake County in 1958. Its Winter, its January, a major snow has fallen so let us examine each origin story briefly.

The Chicago based Morton Salt Company has been making history and headlines since 1848. It began during the Gold Rush Era when the endless demand for salt by the pioneering, adventure-seeking Westward migrates peaked, the company first launched under founder Alonzo Richmond. In 1889 Joy Morton purchased his company, and renamed it Morton Salt Company to incorporate her family heritage. By the turn of the century, demand and supply spiraled upwards. In 1911 an image of the 'iconic 8 year old girl 'was introduced. In 1914, the famous mantra "When It Rains, It Pours" was introduced. Many updates ensued in the coming decades but the brand hit its zenith by 1941 when the 'Salt Girl' in the

yellow dress first appeared. Today, the Chicago based company has more than 20 production facilities in the US, Canada and the Bahamas.

1958 saw Morton acquire the site for one of its most valuable production facilities. The Salt Mine beneath Lake Erie. Located 30 miles east of Cleveland, yes it is the same Fairport Mine mentioned previously. Work began in earnest in 1959 and the first production was market ready in 1960. What makes this site unique is its location. Seems that shallow seas covered much of North America many many millions of years ago. Salt water was trapped in its basins. As these basins evaporated over the time span of 400 million years, what was left behind were these salt deposits. At one time this mine deposit was the deepest in North America. The deposit beneath Lake Erie spans 13 square miles or in layman terms nearly 2,500 football fields. The depth is 2000 feet. Its floor length is 3 miles. A typical work day begins with a 4 minute elevator ride, followed by a 3 mile trek on a golf cart to that days work site / main lode. A series of airlocks regulate air pressure. Fresh air is pumped down the shaft from above. Workers wear safety glasses, carry emergency airlocks (60 minute supply) and have headlamps on their hardhats. Undercutting or making 10 foot slices into the salt walls is followed by drilling small holes. Explosives are eventually inserted and ignited by electric starters. Several thousands of tons of fresh rock salt is then moved to the storage for transport. A room and pillar system is created. This leaves a central pillar to provide stability as well as hold the entire structure up. As new tunnels are created, previous work sites are left for storage or abandoned entirely. At its best, the Fairport Mine can deliver 1.3 million tons of product annually.

Fairport Mine Fast Facts

- Production began in 1960
- The mine is approximately 2,000 feet deep, 3 miles in length, contains over 60 miles of tunnels
- Equipment is disassembled, brought down the main shaft, reassembled and used for the duration. No equipment returns to the surface at its end of service.
- For many years, it was the deepest salt mine in the entire USA, spanning 13 square miles or 2,500 football fields
- Ohio ranks 4th nationally in total salt production. Nearly 5 millions tons are removed yearly
- More than 1.4 million tons are mined seasonally in Lake County's Fairport facility
- All production (bulk and bag) is dedicated to ice control
- The salt is sold in bags of various sizes, up to 80#, and in bulk. It is delivered by trucks and lake freighters
- The current mine extends 3 miles out into Lake Erie
- Through the years the mine has employed 170 persons of which up to 110 work underground
- The year round underground temperature is about 80 degrees Fahrenheit.
- Public Tours ended in the early 1990s

Sources - Business Insider, September 27, 2016, Wired, May 3, 2016, Morton Salt Company web archives, Fairport Harbor Historical Society archives. Mine Interior Photos by Rickey Rhodes.



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