

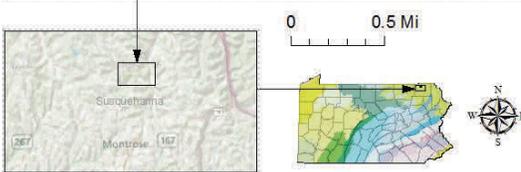


SALT SPRING SUSQUEHANNA COUNTY



Location

Salt Springs State Park, Susquehanna Co., Franklin Twp., lat: 41.9117, lon: -75.8648, Franklin Forks 7.5-minute



Geology

The Salt Spring at Salt Springs State Park is a fairly rare saline spring in Pennsylvania. It was discovered by American Indians; white settlers quickly developed a keen interest in an easy source of salt. Following the disclosure of the location, workers in the early 1800s drilled a well to a depth of 300 feet near the original salt spring. It was deepened several times over the years to 800 feet. Reportedly, no fresh water occurs below 380 feet.

Today, a walled-in, small diameter pipe shows the location of the salt spring. Little flow is typically apparent from the borehole. The source of salt is likely shallow saline water associated with ancient seas, then trapped in the pores of Devonian sandstones. In northeastern Pennsylvania, the fresh-salt water interface is not very deep beneath the valleys. Methane bubbles, which indicate the presence of shallow natural gas from the decomposition of organic matter, can be seen floating to the top of the borehole.

The most likely cause of Salt Spring is the presence of fractures in the valley that reach deeper and provide a connection to the surface as water circulates along a deeper flow path over the area. The recent glaciation disrupted the prior topography and its groundwater circulation, possibly to the extent that salty water is today being flushed with fresh groundwater flow. The extent of these circumstances is probably local; however, there are a few mineralized springs in western Susquehanna County region. Glacial deposits blocked the path of Fall Brook and diverted it across the topographic saddle. Waterfalls tumble over Devonian bedrock that was cut to a small gorge. Glaciers diverted Fall Brook into Silver Creek and deposited in places over 100 feet of glacial till.



The Salt Spring borehole.



Fall Brook at Salt Springs State Park.

Recommended Reading

Inners, J. D. and Fleeger, G. M. (eds.), 2002, From Tunkhannock to Starrucca: Bluestone, glacial lakes, and great bridges in the “Endless Mountains” of northeastern Pennsylvania, 67th [Field Conference of Pennsylvania Geologists](#), 145 p.

For information regarding outstanding geologic features, contact the Pennsylvania Geological Survey:

Bureau of Topographic and Geologic Survey, 3240 Schoolhouse Rd., Middletown, PA 17057

717-702-2017 www.dcnr.state.pa.us/topogeo

Visit the [Salt Springs State Park](#) web page of DCNR.