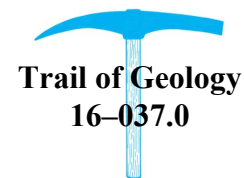


OUTSTANDING GEOLOGIC FEATURE OF PENNSYLVANIA

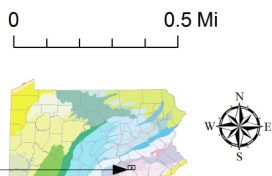
CHICKIES ROCK, LANCASTER COUNTY

Stuart O. Reese, 2016



Location

Chickies Rock, Lancaster Co., West Hempfield Twp., lat: 40.05141, lon: -76.51678 (parking along Pa. Route 441); lat: 40.05174, lon: -76.52530; Columbia West 7.5-minute quadrangle



Geology

Chickies Rock is a landmark along the lower Susquehanna River and a site rich in geologic history. A resistant ridge of quartzite towers over the river and provides for a scenic view. The Chickies Formation is thought to have been deposited originally as a beach sand during the Cambrian Period. Vertical worm tube borings called *Skolithos* and ripple marks are visible at Chickies Rock. After their day at the beach, the sediments passed through a long, tortured journey: burial and lithification; heat, pressure, and metamorphism; two stages of folding and thrust faulting; and finally, erosion. Mountain-building forces pushed the rocks to the northwest into a plunging anticline (upfold), with minor folds mixed in. The structure in the rocks can be seen from river level as you look to the east (photograph at far left below). The fold plunges to the east at about 10 degrees. The rocks have been moved from the southeast over limestone, which lies beneath Chickies Creek just to the north at its confluence with the Susquehanna River.



Far left: Chickies Rock anticline.
Top middle: Ripple marks.
Bottom middle: Northwestern face of Chickies Rock.
Top right: View to the southwest of the Susquehanna River.
Photographs by Kevin Tarbert and Michael Techky, Pennsylvania Geological Survey interns.

Recommended Reading

[Chickies Rock Park](#) web page of Lancaster County.

Published by the [Pennsylvania Geological Survey](#).

