

# OUTSTANDING GEOLOGIC FEATURE OF PENNSYLVANIA

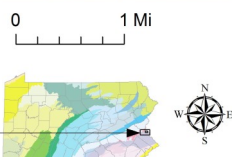
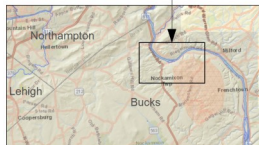
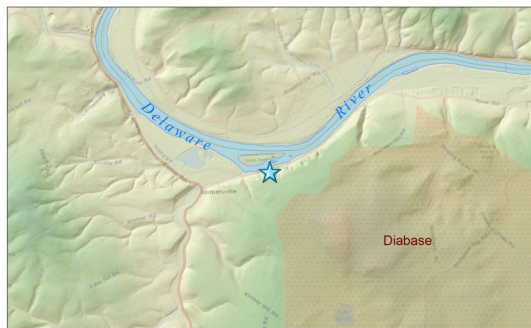
## NOCKAMIXON CLIFFS, BUCKS COUNTY

Stuart O. Reese, 2016



### Location

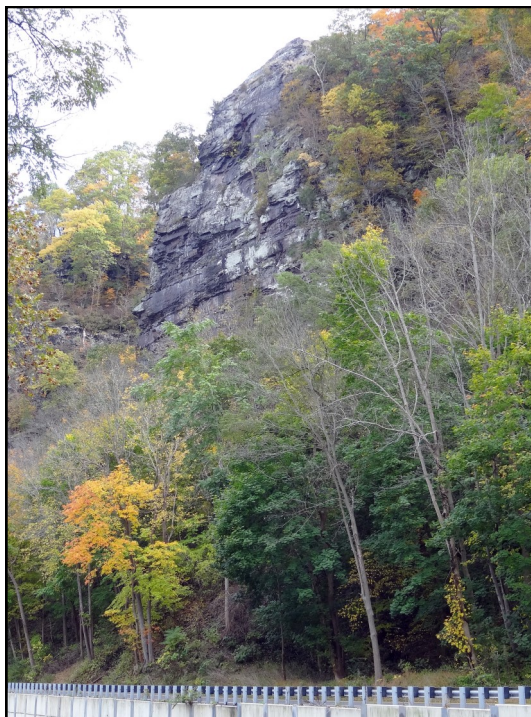
Park along Pa. Route 32, Bucks Co., Nockamixon Twp., lat: 40.56232, lon: -75.16349 (parking); Riegelsville 7.5-minute quadrangle



### Geology

The nearly vertical Nockamixon cliffs are a spectacular geologic site along the Delaware River. The cliffs are composed of unusually hard shale, siltstone, and sandstone of the Brunswick Formation (Triassic age). As Africa separated from North America about 250 million years ago, streams dumped sediment into a stretched depositional basin during the Triassic Period. Coarse-grained sediments accumulated along the basin edges. Rivers laden with pebbles and sand built alluvial fans. Finer grained sediments settled in lakes.

The climate was generally warm but variable; dinosaurs passed through the region. About 200 million years ago, a dark igneous rock called diabase was injected into the basin in the form of magma. The heat associated with the Coffman Hill diabase sheet baked the rocks of Nockamixon, making them dense and resistant. Faulting and folding of these rocks occurred as the basin was tilted to the northwest. Over a long period of time, the rocks were exposed and eroded. Their resistant nature is reflected in the sharp topographic breaks along the Delaware River.



### Recommended Reading

Inners, J. D., 1980, Nockamixon State Park, Bucks County—Rocks and joints: Pennsylvania Geological Survey, 4th ser., [Trail of Geology 16-014.0](#), 5 p.

[Nockamixon State Park](#) web page of DCNR.

*Nockamixon State Park is located 5 miles south of the cliffs.*