

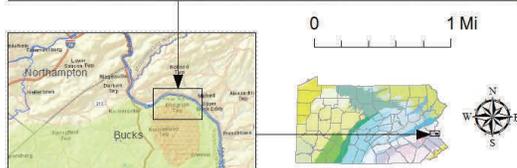
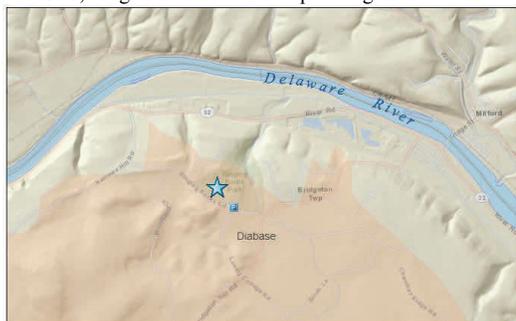


## RINGING ROCKS BUCKS COUNTY



### Location

Ringling Rocks County Park, Bucks Co., Bridgeton Twp., lat: 40.56011, lon: -75.12878 (parking); lat: 40.56249, lon: -75.12946, Riegelsville 7.5-minute quadrangle



### Geology

The Mesozoic rocks in and around Ringling Rocks County Park developed as Africa split from North America about 250 million years ago. Upland streams dumped sediment into the Triassic Birdsboro basin that stretched from New York to Virginia. At the end of the Triassic, about 200 million years ago, a dark igneous rock called diabase intruded the basin in the form of magma as continental rifting pulled the crust apart. Diabase, because of its tough, interlocking minerals, has typically formed the local topographic highs. Near-glacial conditions during the last ice age formed the boulder field when repeated freeze-thaw cycles broke off large pieces of fractured bedrock. Cold summers allowed boulders to slide downhill on slippery permafrost turf. The Ringling Rocks site is one of the largest diabase boulder fields in the eastern United States. Many of the rocks have a characteristic “ring” when struck with a hammer.

Numerous legends and stories have been advanced regarding the musical properties of these boulders. Much effort has gone into understanding why the rocks ring, because not every boulder will produce a tone when struck. Some visitors put the number at one in six while others say one in three rocks that are struck will ring. A general explanation is that a delicate and complex balance of factors and conditions including mineralogy, weathering properties, and micro-climate combines to produce a distinctly musical rock. As the outer rim of a boulder weathers, pyroxene minerals expand into clays, creating tension in the rock. Projecting boulders that are exposed in the sunshine away from the shade of the woods are among the ones that have developed a capacity to ring when struck.



### Recommended Reading

Inners, J. D., 1980, Nockamixon State Park, Bucks County—Rocks and joints: Pennsylvania Geological Survey, 4th ser., [Park Guide 14](#).

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](http://www.dcnr.state.pa.us/topogeo)  
Visit [Nockamixon State Park](#) and Bucks County [Parks and Recreation](#) web sites.