

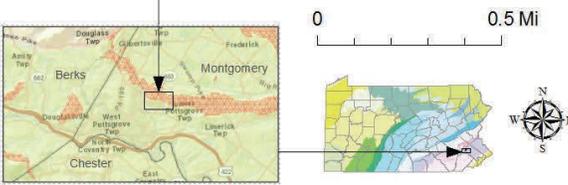


## RINGING ROCKS MONTGOMERY COUNTY



### Location

Ringling Hill Fire Company Park, Montgomery Co., Lower Pottsgrove Twp., lat: 40.27004, lon: -75.60641 (parking), Sassamanville 7.5-minute quadrangle



### Geology

Ringling Hill Fire Company Park is located 32 miles southwest of similar though larger Ringing Rocks of Bucks County. Both sites are exceptional boulder fields that have a certain “ring” to them. Their origin began near the very end of the Triassic, about 200 million years ago, when an igneous rock called diabase intruded Triassic sedimentary rocks in the form of magma. This occurred as Africa rifted from North America during the breakup of the supercontinent Pangaea. After diabase sills and dikes intruded the basin, normal faulting and some folding developed as the entire basin tilted to the northwest. Long-term weathering of the rocks has uncovered the diabase. Because of its tough, interlocking minerals, diabase has formed the local topographic highs in what was once an upland basin. The Mesozoic rocks are part of the Gettysburg-Newark Lowland section of the Piedmont physiographic province. Near-glacial conditions during the Pleistocene formed the boulder field when repeated freeze-thaw cycles broke off pieces of fractured bedrock.

As the site’s name suggests, some of the boulders will ring like a bell when struck by a hammer. The musical quality of these boulders has long attracted attention. It’s generally thought that a delicate and complex balance of factors and conditions including mineralogy, weathering properties, and micro-climate combines to produce a distinctly musical rock. Two minerals dominate the composition of the diabase: plagioclase feldspar and pyroxene. As the outer rim of a boulder weathers, pyroxene minerals change and expand into clays, creating tension in the surface of 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.



Left: Block of diabase showing pitted weathering of its surface. Measuring scale at center top is 2 x 3.5 inches. Right: Ringing Rocks boulder field of Montgomery County.

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)  
[Ringing Hill Fire Company](#) owns the park.